

# DESIGNING BALANCED SCORECARD FRAMEWORK BASED ON CULTURAL VALUES

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**TOHOKU UNIVERSITY**  
Graduate School of Economics and Management

**DESIGNING BALANCED SCORECARD FRAMEWORK  
BASED ON CULTURAL VALUES**

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by  
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## ABSTRACT

Healthcare organizations have adopted a comprehensive performance measurement system (PMS) more than 20 years in which non-financial measures play important roles. The adoption was driven mainly by increasing demands of better health quality services from communities, and also by growing demands on the hospitals' accountability, effectiveness, and efficiency from stakeholders. As institutions play major roles within a national healthcare system, public hospitals are inseparable from those demands. Hospitals have been acknowledged for utilizing major portion of national health resources and therefore, are encouraged to implement a comprehensive PMS such as balanced scorecard (BSC). Many studies have reported that adoption of BSC by hospital in high-income countries (HICs) setting have promoted a balanced performance between financial and non-financial outcomes such as higher employee motivation and patient satisfaction. However, there are still limited empirical investigations on the successful of the adoption in non-high-income countries (non HICs), including in Indonesia.

This main objective of this research is to investigate the PMS adoption from cultural perspectives in the context of Indonesian public hospitals., by (1) reviewing the existing experiences of BSC implementation in High-Income Countries and then assess applicability of BSC adoption to Indonesian public hospitals, (2) conducting a case study on organizational culture to understand contextual culture of Indonesian public hospitals, and (3) investigating the influence of organizational culture on the acceptance, importance and use of PMS in Indonesian public hospitals.

The first objective was conducted by reviewing literatures from major world's academic research database. Literatures suggested that the implementation of BSC requires harmonization of hospitals' BSC best practices and the government regulations. Furthermore, the implementation strategy should be in gradual and combined with the readiness and cultural assessment. The second objective was conducted by diagnosing organizational culture using Competing Values Framework (CVF) developed by Cameron and Quinn. The survey was conducted in a local public hospital owned by local government with 266 respondents. Results showed that the hospital is characterized by a mixture of a friendly workplace and hierarchical control through rules and regulations. The hospital's business is run by focusing on the development of employees and managed like an extended family with participation, openness, high commitment, and loyalty as organization's glue. Flexibility, employee autonomy, and teamwork are valued rather higher than competition or innovation efforts.

The third study was conducted by employing Partial Least Squared-Structural Equation Model (PLS-SEM). The findings revealed that the use and the acceptance of a multiple-based dimensions of PMS such as BSC is clearly determined by perception and cognition of the employees. Culture can be enabler or barrier to the PMS use, acceptance and perceived importance. Clan culture that characterized by collaborative working environment is found has a positive and significant influences to the acceptance and the perceived importance of PMS. Consequently, the hospital is suggested to be more decentralized in decision-making process and encourages hospital's directors and managers to act as employees' mentors rather than as coordinator and organizer.

This study has contributed to the literature on organizational theories in general and to the management accounting in particular by investigating organization performance measurement system. The findings reinforced the relevancy of contingency approach and the PMS acceptance models (theories) in Indonesian public hospital setting. The study is perhaps the first to study the relationship between hospital cultures and the acceptance, the importance, and

the use of BSC. The results were expected to be useful in designing a BSC framework for Indonesian public hospitals. However, further research by involving hospitals across cities, islands, and regions within the country is suggested since this study is conducted in one city public hospital. It is also desirable for future research to compare the PMS contextual factors as there are some types of Indonesian hospitals including private and public, local and national, and so on.

Keywords: *Performance measurement, Balanced scorecard*, Competing Values Framework.



*Dedicated to*  
**MUHSYAF Family**

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# Chapter 1

## INTRODUCTION

### 1.1 Research Background

Hospitals are an important part of the health system because they provide complex curative care that depends on their capacity, acting as the first, secondary, or final reference level curative care facility. Hospitals are the center for the transfer of knowledge and skills and constitute an essential source of information. Hospitals play a direct role in the education and training of health workers, provide data needed by national health planners, and generally consume a major part of national health resources (Saltman et al., 2011), and therefore, their performance is very important to be managed by emphasizing accountability, effectiveness, and efficiency (Radnor & Lovell, 2003). In addition, there are growing demands to ensure transparency, control and reduce variation in clinical practice (Groene et al., 2009). If the hospital does not attempt to provide a standard level of care, the reputation of the organization can be jeopardized (Groene et al., 2009). By measuring performance, hospital managers and stakeholders can make the necessary improvements (Griffith et al., 2002).

One of the most recommended business performance measurement tools that have the potential to support hospital performance management goals is a balanced scorecard (BSC) (Aidemark, 2001; Bilkhu-Thompson, 2003; Modell, 2004). The BSC is considered to present a multi-dimensional view of performance across different objectives and stakeholders, as required for many public sector organizations. Previously, performance measurement systems (PMS) focused on financial performance and paid little attention to non-financial measures. This traditional approach is criticized because it causes management to pay less attention to the long-term interests of the organization, and is unable to measure value in today's business environment where intangible assets and strategy implementation are everything (Niven, 2008).

BSC developed by Kaplan and Norton in 1992 (Kaplan & Norton, 1996) offers how to describe, implement, and manage strategies at all levels of a company. It is built on the concept of critical success factors (CSF) from a series of performance measures and indicator indicators in four different perspectives, i.e. learning and growth, internal processes, customer satisfaction, and finance the performance. Performance indicators in each perspective are developed from existing data systems and are presented as an integrated report for decision making (Castaneda-Mendez et al., 1998). Matrices are usually measured at monthly or quarterly frequencies to evaluate the effectiveness of interventions, improve quality, motivate change and move towards organizational excellence (Kaplan & Norton, 2001).



Currently, BSC has been widely adopted by hospitals in high-income countries (HICs)<sup>1</sup> and more recently has been extended to the non-HICs (Rabbani et al., 2007). In HICs, BSC has been adopted to all fields relating to health care including hospitals, health care systems, university medical / health departments, mental health centers, pharmaceutical companies, and health insurance companies (Zelman et al., 2003). BSC is believed to overcome limitations in traditional management control systems and assist in communicating strategies within an organization (Rabbani et al., 2007). However, acknowledgment of BSC adoption within non-HICs is less known by existing literature (Healy et al., 2002; McPake, 2016; Rabbani et al., 2007).

## **1.2 Significance of Research**

Research focusing on performance management within the healthcare setting is still relevant for several reasons. Gurd & Gao (2007) argued that increase of demand from aging populations, better treatments wanted by many people, shortage of professional workers, and reducing governments financial subsidiaries were still relevant to the theme. Considerable strategic challenges and strong pressure to be more responsive to costumers' demands by improving quality and efficiency were also being reported (Chow et al., 1998; Kocakulah & Austill, 2007; Lorden et al., 2008). Healy et al. (2002, pp. 36-54) classified hospitals' pressures into three groups; (1) demand-side changes (changes in demography, fertility, ageing, migration, changing patterns of disease, changing risk factors, and hospital-acquired infections), (2) supply-side changes (changes in technology, clinical knowledge, and workforce), and (3) political and societal changes (financial pressures, internationalization of health system, and global changes in the market for medical research and development). While traditional performance measurement and management control systems lack abilities to meet strategic objectives of healthcare organization (Gurd & Gao, 2007; Lorden et al., 2008), BSC adoption was considered as a solution (Baker & Pink, 1995; Gumbus & Wilson, 2004; Naranjo-Gil et al., 2016; Zelman et al., 2003).

As the most important management innovation of the 20th century, the Balance Scorecard (BSC) has been adopted in a broad range of industries from manufacturing to healthcare and has received considerable attention from both academic and industry press

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<sup>1</sup> According to the World Bank 2018's classification, low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of \$1,005 or less in 2016; lower middle-income economies are those with a GNI per capita between \$1,006 and \$3,955; upper middle-income economies are those with a GNI per capita between \$3,956 and \$12,235; high-income economies are those with a GNI per capita of \$12,236 or more (<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>).

(Zelman et al., 2003). BSC adoption in the healthcare industry is considered to have similar issues to the other kind of industries such as the manufacturing industry. However, Zelman et al. (2003) reported that healthcare industries faced some unique challenges such as the complexity of measuring, interpreting, and comparing the medical staff relations and quality of care.

Since Indonesia entered the Reformation Order in 1998, the decentralization policy initiated in 1991 has been strengthened by The Government of Indonesia (GOI). Decentralization drives significant changes in the roles and responsibilities of various levels of government. Responsibility for the implementation of health services was transferred to local governments at the district level, together with almost a quarter of a million health workers. This decentralization policy also applies to hospitals managed by the central and regional governments. One of the Indonesian decentralization actions is institutionalizing public agency service institutions called Badan Layanan Umum (BLU). The BLU institution, which began to be implemented in 2003, refers to a scheme for the GOI institutions that directly related to public services such as hospitals and universities, which allows them to apply flexible financial management by emphasizing productivity, efficiency, and effectiveness (GOI, 2003b). According to Preker & Harding (2003), the scheme is an attempt to improve the performance of public hospitals through corporatization.

The BLU scheme provides more spaces for hospitals in controlling their budget, utilizing their income, making the investment, initiating partnerships with private sector services and investors, and managing debt and receivables, as well as personnel management more independently and flexible. Through BLU scheme, Indonesian public hospitals are expected to reduce dependence on central government subsidies, improve competitiveness, and serve communities in better quality (Maharani & Tampubolon, 2017).

Maharani & Tampubolon (2017) reported that the BLU scheme had indeed succeeded in increasing the income and expenditure of Indonesian public hospitals but not efficiency and equity. However, they highlighted that BLUD hospitals were not effective in the design of their implementation because they were not through a pilot model. They also strongly recommend increasing the capacity and capabilities of hospital managers and maintaining regular monitoring (Maharani & Tampubolon, 2017).

While there is a continued focus that exists towards improved quality in healthcare in most HICs, unsatisfactory quality of health services (particularly hospitals) continues to be reported from Low-Income Countries (LICs) including lack of resources such as beds, drugs, and staff (Jonsson et al., 2007; Ovretveit & Al Serouri, 2006). Healthcare workers are limited

in number for the vast population, and there is an imbalance in the skill levels of these workers (Ovretveit & Al Serouri, 2006). Although some countries have defined explicit norms and standards of hospital care as part of long-term health sector strategies, many countries lack any specific hospital strategy (Rabbani et al., 2011).

The GOI, through The Ministry of Health (MoH), has been promoting BSC concept since 2005 to measure Indonesian public hospitals (MoH, 2005). As shown in many governmental strategic plan documents provided for the government-owned hospitals, The MoH also encouraged the public hospitals to apply BSC as their strategic management tool. Unfortunately, reports regarding the progress of BSC implementation in Indonesia are not available.

It is still difficult to find analytical studies on performance management tools such as the BSC in healthcare management research. Learning from experiences across countries is required for review lessons learnt and determine feasibility in no-HICs such as Indonesia by translating positive experiences across borders (Rabbani et al., 2007). Therefore, in this research, literature review regarding BSC adoption across country setting and investigating its applicability to Indonesian public hospital setting will be an important part.

PMS adoption in healthcare organizations is acknowledged to be more complicated than in other industries since their goals are challenging to operationalize because of the complexity of treatments, settings and patient groups (Adair et al., 2006, p. 59). Furthermore, the combination of professional and administrative management models and the interrelationship among multiple stakeholders create greater complexity in measuring, interpreting and comparing the medical staff relations and quality of care (Adair et al., 2006, p. 59; Zelman et al., 2003, p. 1). Healthcare organizations as public organizations also have a more complex pattern of financial accountability than private companies have (Peter Smith, 1993, p. 137).

Within high-income countries (HICs), balanced perspectives of BSC have promoted integration and facilitation of clinical, operational, and financial indicators with higher employee motivation and patient satisfaction as outcomes. But different stories of their implementation came from non-HICs. Politic and leadership priorities, resource constraints, local culture, levels of education, and quality of information systems were considered as challenges as well as lack of involvement from medical professionals and lack of access to information (Rabbani et al., 2010).

Rabbani et al. (2010) and El-Jardali et al. (2011) also reported that culture was one of the constraints when BSC is implemented in Pakistan and Lebanon hospitals. Hence, assessing contextual factors such as hospital culture types and values should be a pre-requisite (El-Jardali

et al., 2011; Rabbani et al., 2010). Similarly, Shortell et al. (1995) mentioned that the successful implementation of quality care initiatives requires a significant commitment to a culture emphasizing empowerment, autonomy, and risk taking. Cameron & Quinn (2011) argue that organizational culture is associated with an organization's sense of uniqueness, its aim, goals, mission, values, and main ways of working and establishing shared beliefs. Therefore, organizational culture assessment has been recommended as a key prerequisite for improving the quality of care and organizational effectiveness (Forsythe, 2005). Hence, this research will investigate the relationship between culture and the acceptance of PMS, and its importance and utilization.

### **1.3 Research objectives**

The main objective of this research is to review the applicability of BSC as public hospitals' PMS in the context of Indonesia setting and investigating the relationship of organizational culture to the acceptance, importance and the use of comprehensive PMS such BSC. Specifically, the objectives are as follows:

- a) To review the existing experiences of BSC implementation in High-Income Countries and to assess BSC's applicability in the Indonesian public hospital setting;
- b) To understand existing organizational culture of Indonesian public hospitals;
- c) To investigate the relationship of organizational culture to the acceptance, the perceived importance, and the use of BSC as the PMS of Indonesian public hospitals.

### **1.4 Research Methods**

The study is situated within the positivist research paradigm since its underlying idea is to explain important social phenomena by examining the relationships between and between them (Thomas, 2004). Positivism requires a process that must be free of value, cause, and effect, and can be tested in different environments (Creswell, 2013). Experiments and surveys are the most typical types of positivist research strategies used in social science research (Thomas, 2004). The case study approach was chosen to obtain an understanding of the context and a deeper understanding of the research. In this research, a case study was chosen to understand the role of contextual culture on the performance measurement system. Yin (2018) explained that the case study is good when researching a complex object and trying to explain, understand or describe social systems that are normally too complex for other strategic approaches.

The case study was conducted at The General Hospital of Mataram City (GHMC) located in Mataram, West Nusa Tenggara Province, Indonesia. GHMC is owned by The Mataram City

Government. The hospital started to operate in March 2010. The hospital offers care to outpatients and inpatients of all socio-economic classes. GHMC was selected as the study site because the hospital has been implementing BSC as its PMS since 2010, and the hospital managers in all levels were willing to participate.

This study employs paper-based questionnaires which were separated into two main parts. The first part was provided for diagnosing current hospital culture perceived by employees using The OCAI (Organizational Culture Assessment Instrument) developed by Cameron & Quinn (2011, p. 27). The second part of the questionnaire is designed for gathering information on the perceived acceptance, and the perceived importance and the use of current PMS by the hospital. Measures of acceptance, PMS perceived importance, and PMS Use constructs were adopted from Aboajela (2015).

Since the questionnaire was originated in English, the questionnaire then was translated into Indonesian language. A number of changes were made to the survey after piloting the questionnaire to 11 lower-middle managers of the hospital. After considering the comments and suggestions of these managers, the questionnaires were then distributed to 305 hospital's employees.

The analytical procedure in this study is split into three subsections. Descriptive analysis is the first one and then followed by analyzing hospital culture from the OCAI instrument. The Partial Least Square – Structural Equation Model (PLS-SEM) was chosen to analyze the relationship between organizational culture, the acceptance, and the importance and use of PMS. The PLS-SEM's involves three main procedures: (1) validating measurement model, 2) testing the structural model, and (3) test of hypotheses (Hair et al., 2017). Details on the research framework and methodology will be described in Chapter 5.

## **1.5 Contribution of the research**

Research regarding cultural influences on performance measurement systems to date has been found in the context of Indonesian public hospitals setting. This study is expected contributed in general to the literature on performance management and particularly to bridging the gap in the knowledge about performance measurement systems in public sector organizations. Current PMS, i.e. BSC, adopted by Indonesian public hospital is originated from the western country that grouped in HICs. Studies relating to the successful and the failure of BSC adoption were mostly conducted in HICs and commercial companies setting. Due to the scarcity of the literature on influence the cultural context on the adoption of BSC, the findings

in this research would be important in designing PMS framework to be implemented in Indonesian public sector and public hospitals in particular.

## **1.6 Structure of Research**

This thesis consists of five chapters. Chapter 1 provides the background, significance, objectives, brief review of methods and contribution of the research. Chapter 2 contains a literature review on the adoption of BSC as hospital performance system. At the beginning of the chapter, the performance measurement concept is discussed, including performance measurement within the public sector organization, followed by BSC development and its application across countries in the context of healthcare organization setting.

Chapter 3 contains a literature review on the organizational culture. This chapter defines the definition, perspectives, and typologies of organizational culture. In addition, Chapter 3 literature review on the relationship between culture and organizational performance were also discussed. Chapter 4 contains the Indonesian context of the national health system and public hospitals. This chapter describes historical development and recent conditions of the Indonesian health system and public hospitals in particular.

Chapter 5 presents the case study of organizational culture influence on the acceptance, importance, and use of PMS. Descriptive characteristics and results of hospital culture diagnosis were also discussed. The final chapter, chapter 6, summarizes the findings, denotes the limitations of this research, and states possibilities for future research.

## **Chapter 2**

### **LITERATURE REVIEW ON THE ADOPTION OF BALANCED SCORECARD AS HOSPITAL PERFORMANCE SYSTEM**

This chapter describes literature review on the adoption of BSC as hospital performance system across countries. Its applicability to Indonesian public hospital is also discussed. Since BSC is a tool for performance measurement, the chapter will be started with a brief review on performance measurement concept, then followed by the role of non-financial measures, and the application of performance measurement within public sector organization.

#### **2.1 Performance Measurement**

Performance means something that has been done, or is a result of a number of efficient actions in the past (Lebas et al., 2002). To the context of public sector organization, Talbot (2010, p. 33) highlighted that there are specific characteristics of performance which generally will always be related to input, output, and outcomes. Input is a source used to produce services including humans, facilities, or materials such as the number of tons of material or money used to produce. Outputs refer to immediate results of organization's activity, while outcomes generally refer to the results or benefits obtained by the user/customer.

In public sectors, 'performance' can have various meanings. The definition of 'successful' performance also has a variety of meanings, depending on the interests of the stakeholders. In particular, in the public health service context, there are many stakeholders who need different information about organizational performance. Stakeholders of the healthcare system, for example, are not only the patients but also communities, donor agencies, taxpayers, and doctors. For many stakeholders, the definition of 'successful' performance may be a 'successful' clinical outcome, namely capable of providing appropriate surgical and medical services. For other stakeholders, efficiency may be the crucial one. Health care organizations recognize these various needs, which are reflected in their strategic plan. Thus, most of their main strategic objectives are non-financial measures which are relevant to the latest comprehensive performance model.

Miller (2005, p. 72) defined performance measurement as “all about measuring the right things at the right time for the right people.” While U.S. General Accounting Office (GAO) defined performance measurement as “the ongoing monitoring and reporting of program accomplishments, particularly progress towards pre-established goals which typically conducted by program or agency management (GAO, 2012, p. 3).” These two definitions

indicate performance measurement as a managerial tool (Collier, 2007, p. 379) produce performance indicators generally expressed by a number and a unit of measurement (Franceschini et al., 2019). Franceschini et al. (2019) also explained that most of performance indicators concern on effectiveness (doing the right things), efficiency (doing things right), and customer satisfaction.

Given above explanation, it can be summarized that performance measurement is about measuring outcomes and efficiency of services or programs which lead to a consensus that managers' accountability would be more objective when they are assessed with performance measurement.

## **2.2 Role of non-financial measures in performance measurement**

Organizations have transformed from entirely relying on conventional financial performance measurements to a combined financial measures and non-financial measures in order to accurately reflect changing environments and improve decision (Ittner & Larcker, 1998). Newer performance measurement models provide a comprehensive way to measure organizational performance.

Johnson & Kaplan (1987, p. 1) stated that "traditional performance measurements systems produce information that is too late, too aggregate, and too distorted to be relevant for managers planning and control decisions." They explain that the current organization no longer relies on financial aspects because it tends to produce information that is too slow, less focused, and too distorted for managers to carry out the planning and decision-making process.

Conventional performance measurement, which is mostly focused on financial measures, does not reflect organizational goals and strategies. The focus on increasing productivity in the 1980s immediately identified the impact of quality and customer satisfaction on corporate earnings (Hoque & Alam, 1999). Newer practices, which emphasize quality control and just-in-time inventory systems and integrated computer manufacturing systems, require a shift of focus in performance measurement. An increasingly higher focus is then given to non-financial performance indicators, and companies are beginning to include quality and customer satisfaction.

The inclusion of non-financial measures in the performance measurement system is aimed to provide more relevant information with decision makers. Stakeholders assume that reporting financial measures alone cannot give them true insight into the company's strategic performance capabilities (Maines et al., 2002). As quality and customer satisfaction are positively related to investor decision making, company revenues, and market value (Banker



et al., 2004; Behn & Riley, 2016; Ittner & Larcker, 1998; Nagar & Rajan, 2001), shareholders demanded for more disclosure of 'non-financial' measures in the company's annual report.

Research on the effectiveness of using non-financial measures for performance measurement shows various results (Abernethy & Lillis, 1995; Chenhall, 1997; Eccles, 1991; Ittner & Larcker, 1998; Perera et al., 1997). Previous studies showed that non-financial performance measures in performance management failed when organizations overemphasize non-financial measures that harm financial indicators. In particular, Chenhall & Langfield-Smith (1998) show that high emphasis on customer satisfaction encourages actions that are inconsistent with overall company strategy to maintain cost efficiency while meeting customer needs.

Many organizations still report non-financial measures at the operational level but have not been followed by a comprehensive performance measurement system to match (Eccles, 1991; Ittner & Larcker, 1998). Other research shows that despite the increased use of non-financial performance measures for targets and operational indicators, at the strategic or decision-making level, financial indicators remain the dominant measure (Lipe & Salterio, 2000). Managers' concern about the accuracy of measurement of non-financial indicators raise questions about actual reliability (Ittner & Larcker, 1998). Ittner & Larcker (1998) found that the need to measure qualitative results was a major implementation problem. Other empirical research shows that senior management tend to ignore unique or non-financial measures in performance evaluations (Libby et al., 2004; Lipe & Salterio, 2000).

Likewise, non-financial measures and quality programs have been received increasing attention in the public sector for many years. The government has encouraged the use of quality measures to ensure the health care sector continues to provide world-class services to the public, even though their resources are limited and reduced. In the mid to late 1990s quality performance reviews and programs, such as 'sustainable quality improvement' were regarded as promising paradigms that would enable organizations, especially public health organizations, to achieve these goals (LeBrasseur et al., 2016). Currently, the majority of measurements taken in public hospitals are non-financial, and some of them are mandatory. Many of hospital activities, which are related to funding arrangements and others, are subjects of ISO (International Standards Organization) compliance, accreditation standards, and clinical effectiveness performance measurements. These activities will match the 'customer' quadrant or 'internal business process' in common BSC frameworks (Abernethy & Vagnoni, 2004; Otley, 2001b).

Non-financial measures are not new to healthcare organizations. They have been used for years to determine the best clinical practices. In 1993-4, the Australian government introduced measures of performance-based funding, which required measurement of efficiency, productivity, quality, and access. Therefore, most indicators needed to be reported by public health providers are non-financial such as waiting time for surgery, emergency and outpatient waiting time, average length of stay (ALOS), and hospital-acquired infection rates. A patient satisfaction survey is also needed to help determine the overall quality of public service provision.

### **2.3 Performance measurement in Public Sector Organizations**

Public sector reform requires public sector managers to adopt comprehensive performance measurement tools to assist them in managing 'over proliferation' or various actions in public sector organizations. The difficulty faced by organizations is to be able to provide a comprehensive, understandable, and applicable performance measure for public sector applications (Kaplan, 2001). The strategic management literatures suggest that there is a strong relationship between performance measurements and strategy. However, in practice, this is not always proven to be so. Empirical research on Victorian regional governments shows that the board does not pay enough attention to the development of 'lead' steps, or steps for long-term sustainability in internal business processes and areas of innovation and learning (Kloot, 1997). Recent research by Modell (2004) on public organizations shows that the inability of public sector organizations to link their various performance indicators with organizational goals (loose easing) is not a sign of weakness but a natural response to the need to provide information to various stakeholders.

However, for board reporting, simple management reports must be prepared by complex and often heterogeneous cost centers in one organization. The report must also summarize many key indicators. Recent empirical research shows that systems implemented to meet government requirements tend to influence internal behavior rather than systems developed in organizations to meet their own needs (Cavalluzzo & Ittner, 2003). Cavalluzzo & Ittner (2003) also found that public sector organizations implementing strategic performance measurement systems, which capture less traditional performance information, experience difficulties in developing subsequent performance measures and accountability.

Factors that cause difficulties for the successful implementation of public sector performance measurement initiatives include (1) technical issues, i.e. information systems cannot provide appropriate data and organizational difficulties in defining appropriate actions,

and (2) organizational issues, i.e. management commitment, decision-making authority, training; and legislative mandate (Cavalluzzo & Ittner, 2003; Kwon & Zmud, 1987; Shields & Young, 1989).

Regarding the technical issues, Ittner & Larcker (1998) reported that lack of highly developed information systems is a major problem in implementing BSC. They also highlighted that 45% of their research respondents found difficulty in quantifying qualitative results. Holmstrom & Milgrom (1991) also found that performance measurement systems are likely to be unsuccessful when performance measures used by companies are difficult to evaluate. Other empirical research by Atkinson et al. (1997), Shields (1995), and Anderson & Young (1999) also confirmed the relationship between implementation issues and technical capabilities.

In accordance with organizational issues, Shields (1995) stated that the support from top management is essentially needed for the successful of performance measurement system implementation. Anderson (1995) found that there is a positive relationship between successful accounting system implementation and decision-making authority. Other empirical research by Kwon & Zmud (1987), Shields (1995), and Shields & Young (1989) concluded that successful performance measurement system is related to employee empowerment, training, or resources offered by organizations. In public sector organizations, legislative pressure and budget cutting can undermine successful performance measurement systems development (Flynn & Talbot, 1996). Research by Chua & Degeling (1993), Abernethy & Vagnoni (2004), Covalleski & Dirsmith (1988), and Lowe & Doolin (1999) concluded that the legislative role in regulating medical practice influence performance measurement in hospitals.

Today's performance measurement of public organizations has also led to the use of multiple dimensions of performance measurement systems. Some of them are the ISO 9001: 2000, Total Quality Management (TQM), Balance Scorecard (BSC), and Malcolm Baldrige. Among them, BSC is recognized as the most important management innovation of the 20th century since it has been adopted in a broad range of industries from manufacturing to healthcare industries and has received considerable attention from both academic and industry press (Zelman et al., 2003). BSC is a framework that helps organizations translates strategy into operational objectives that drive both behavior and performance (Kaplan & Norton, 1996, p. 25). It was originally developed to solve a measurement problem, where financial measures were unable to capture many of the value-creating activities generated by an organization's 'intangible' assets.

## 2.4 Balanced Scorecard

The problem with organizational performance management systems has traditionally focused on financial performance. Despite the fact that financial indicators are essential, focusing only on a single financial dimension will cause managers to pay less attention to operational processes that contribute indirectly to financial results. Therefore, a better method is needed, which is found in BSC. Kaplan & Norton (1996, p. 25) defined BSC as a framework that helps organizations translates strategy into operational objectives driving both behavior and performance. The measures and objectives are viewed across four dimensions of performance: financial, customer, internal business process, and learning and growth. The word “balanced” in the term 'Balanced Scorecard' is an indication of the balanced consideration given to long and short-term objectives, financial and non-financial measures, leading and lagging indicators, and external and internal performance perspectives (Hendricks et al., 2004; Kaplan & Norton, 1996, p. 222).

Through BSC, Kaplan & Norton (1992) distinguished lagging and leading indicators. Lagging indicators represent the consequences of actions taken, whilst leading indicators are the measures that drive or lead to the lag indicators (**Error! Reference source not found.**). Traditional performance measurement system focused on the lagging indicators which are historical in nature and lack predictive power (Niven 2002). Kaplan & Norton (2001, p.247) proposed the mix of lagging and leading indicators that allow employees to distinguish between the measures they could not control and the measures they could influence through their actions (the performance drivers). The 'lead' measures are considered to be more predictive than the lag measures. If organizations satisfy their customers, they can improve their financial performance.

Table 2.1 Lagging and leading indicators

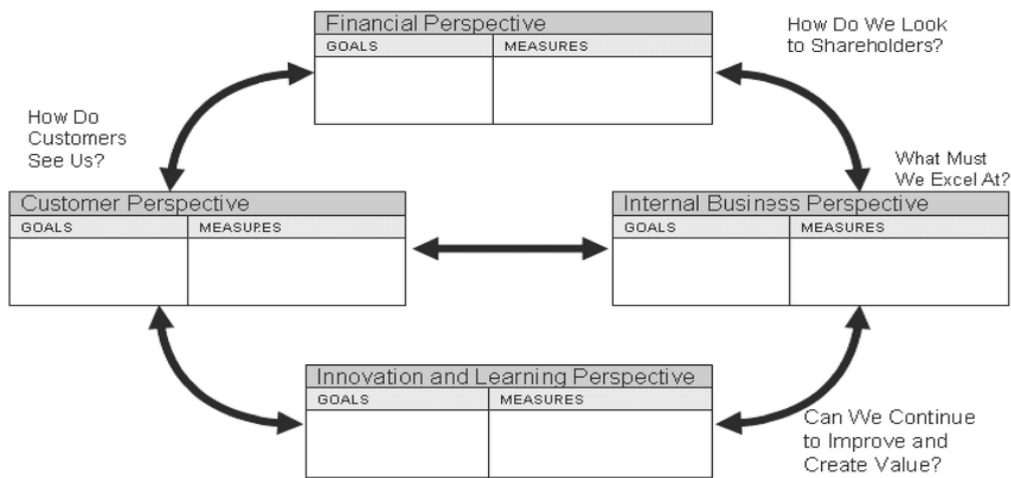
	Lagging	Leading
Definition	Measures that focus on results at the end of a time period (usually historical)	Measures that drive, or lead, to the lag measures (usually measures of intermediate processes and activities)
Examples	<ul style="list-style-type: none"> <li>• Market share</li> <li>• Sales; Profit;</li> <li>• Revenue growth</li> <li>• Costs; ROI;</li> <li>• Cash flows</li> <li>• Employee satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• Hours spent with customers</li> <li>• Depth of relationship</li> <li>• Number of satisfied customers</li> <li>• Revenue mix</li> <li>• Number new development projects</li> <li>• Personal goals attained</li> <li>• Absenteeism</li> </ul>
Advantages	Normally easy to identify and capture	Predictive in nature, and allow the organization to adjust results

	Lagging	Leading
Issues	Historical in nature and do not reflect current activities; lack predictive power	May prove difficult to identify and capture; often new measures with no history at the organization

Source: adopted from Niven (2008, p. 215)

The evolution of BSC since its first appearance can be divided into at least three generations (Lawrie & Cobbold, 2004). In the 1990s, the main concern of the first generation of BSC was to solve the measurement problem of balancing the accuracy and integrity of financial metrics with the drivers for future financial success (Niven, 2005, p. 6) (Figure 2.1).

Figure 2.1 BSC 4-box model: first generation of BSC



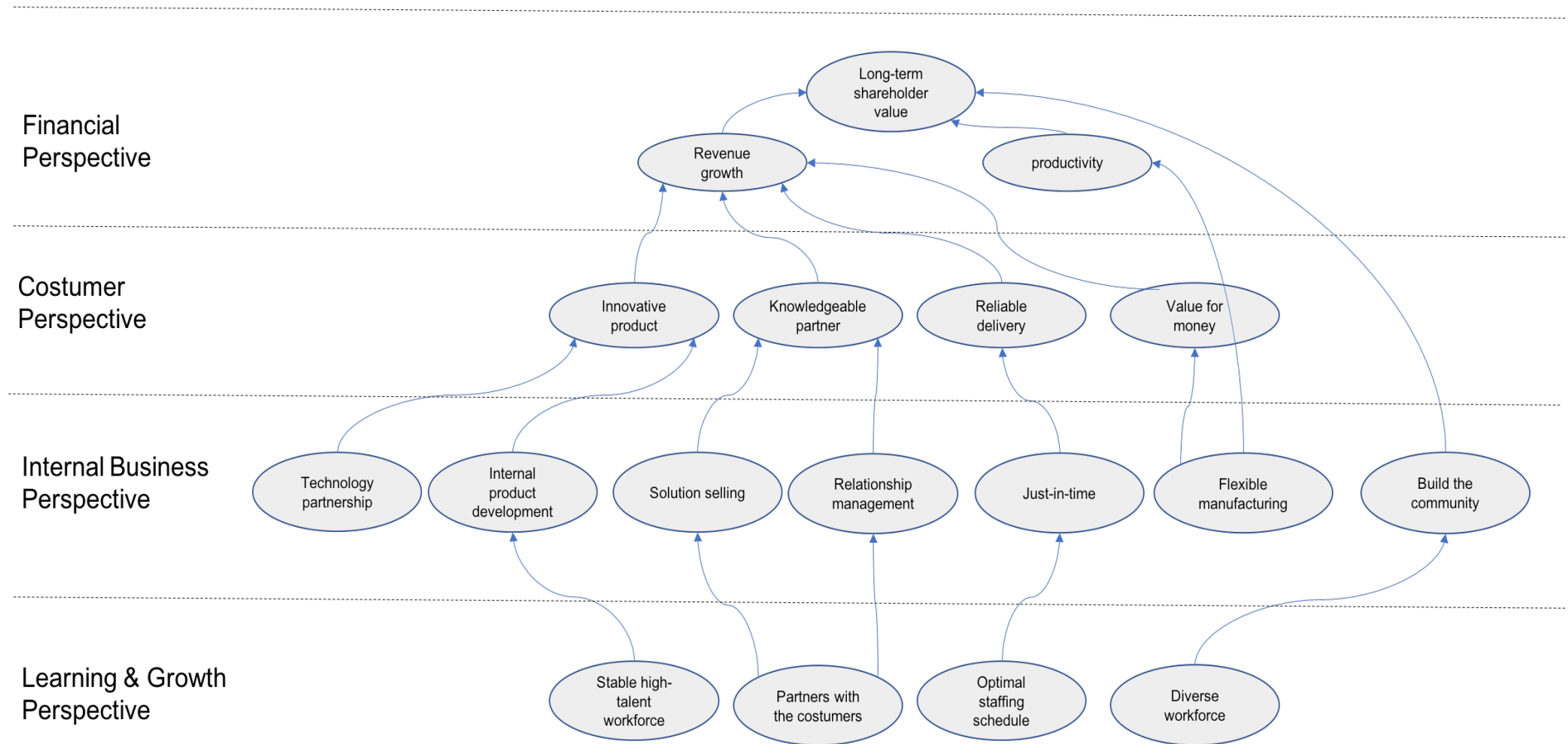
Source: Kaplan & Norton (1996, p. 9)

The first generation of BSC was criticized since Kaplan & Norton have little to say about how (1) to filter organizational performance measures, which often excessively used in order to generate the balanced scorecard, and (2) to cluster measures that should appear in every perspective (Lawrie & Cobbold, 2004). (Kaplan & Norton, 1993) answered these critics by introducing the concept of “strategic objectives” The innovation suggested that there should be a direct mapping between each of the several “strategic objectives” attached to each perspective and one or more performance measures. They also suggested to focus on the causality between measures on perspectives, and by doing this, a "strategic linkage models" diagram, or a "strategy map" would be a result (Figure 2.2). This second generation of BSC was intended to support the management of strategy implementation. This generation empower BSC to evolve from “an improved measurement system to a core management system (Kaplan & Norton, 1996, p. ix).”

The third generation introduced cascading strategies as a response to the second generation. By cascading strategy, the third generation was aimed to reach all organization levels, thus encouraged involvement of all employees within the four perspectives in order to execute the organization's strategy through a strategy map (Figure 2.3). The third generation of BSC helps organization in developing strategic control systems by incorporating objective statements. This third generation of BSC also optionally link 'activity' with 'outcome.' 'Activity' replaces the financial and customer perspectives, while 'outcome' replaces the learning and growth perspective as well as internal business process perspectives (Lawrie & Cobbold, 2004). The third generation focus more on strategic linkage model, and less on specific measures (Perkins et al., 2014).

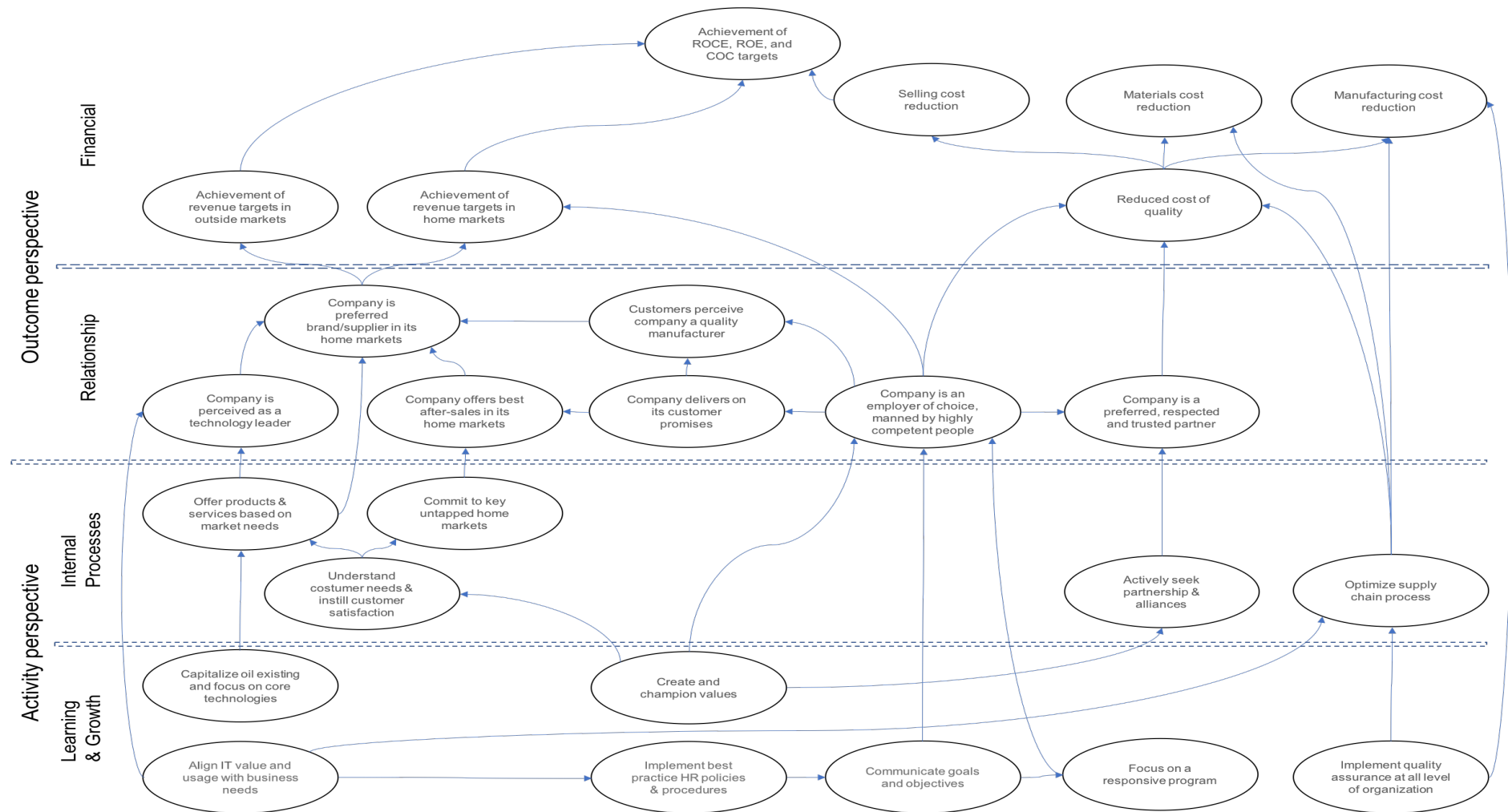
Kaplan & Norton (2008, p. viii) stated that companies mostly adopted BSC-based management system by implementing sequentially five principles. They began with mobilizing the executive team as the first principle, and then followed rapidly by translating the strategy into operational terms as the second principle, and then doing alignment - how to use strategy maps and scorecards to align organizational units, both line business units and corporate staff ones, to a comprehensive corporate strategy - of the organization into the strategies as the third principle. The fourth principle is redesigning some key human resource systems (goal-setting and incentives) and then followed by final principle by redesigning various planning, budgeting, and control systems. Based on this five sequence principles, Kaplan & Norton (2008, pp. 8 - 17) introduced a new development of BSC strategy execution called "Closed-Loop Management System" in six stages introduced a new development of BSC strategy execution called "Closed-Loop Management System" in six stages. This system is designed to help companies to (1) develop the strategy, (2) plan the strategy, (3) align organizational units and employees with the strategy, (4) plan operations by setting priorities for process management and allocating resources that will deliver the strategy, (5) monitor and learn from operations and strategy, and (6) test and adapt the strategy (Kaplan & Norton, 2008, pp. 8 - 17) (Figure 2.4).

Figure 2.2 Example of strategy map (The Hi-Tek Manufacturing Company)



Source: adopted from Kaplan & Norton (2004, p. 368)

Figure 2.3 Example of the third generation of BSC (The Hi-Tek Manufacturing Company)



Source: Adopted from Cobbold et al. (2004)



Figure 2.4 Six-stage of Closed-Loop Management System



Source: Adopted from Kaplan & Norton (2008, p. 8)

## **2.5 BSC adoption by hospitals around the worlds: benefits, functions, and challenges**

Baker & Pink (1995) were the first authors discussing the adoption of BSC concept by hospitals that began in the 1990s. Their article then followed by Chow et al. (1998), Castaneda-Mendez et al. (1998), D Gordon et al. (1998), Wachtel et al. (1999), and Curtright et al. (2000). While Baker & Pink (1995), Chow et al. (1998) and Curtright et al. (2000) used the same perspectives as original BSC perspectives, i.e. financial, customer, internal business (process), and innovation and learning perspectives, Castaneda-Mendez et al. (1998), D Gordon et al. (1998) and Wachtel et al. (1999) modified the perspectives.

Castaneda-Mendez et al. (1998) modified the perspectives by proposing patient-value added to customer perspective, employee-value added to learning and growth perspective, business-value added to internal business perspective. D Gordon et al. (1998) used five perspectives in his framework by using customer satisfaction, internal excellence, innovation and learning, financial viability, and population types. Curtright et al. (2000) developed eight performance categories for Mayo Clinic consisting of 1) customer satisfaction, 2) clinical productivity and efficiency, 3) financial, 4) internal operations, 5) mutual respect and diversity, 6) social commitment, 7) external environmental assessment, and 78) patient characteristics.

Other examples of BSC modification presented in Table 2.2 showing that dissimilarity characteristics between private and public sector entities should be considered when adopting the concept of Balance Scorecard. However, an example of Duke Hospital's BSC framework from Kaplan and Norton's (2001) can be the first guidance, namely after the mission and vision, both financial and customer perspectives in the same level and then followed by the internal process perspective, and the learning and growth perspective (Kaplan & Norton, 2001, p. 155).

Kaplan & Norton (1996, p. 2) initially developed BSC for for-profit (private) sector and as an instrument for managers to navigate their company's competitiveness by emphasizing not only on achieving financial objectives but also on the performance drivers of these financial objectives. For nonprofit organizations, Kaplan (2001) found that BSC, when adopted by a nonprofit sector, enabled all organizational resources—the senior leadership team, technology resources, initiatives, change programs, financial resources, and human resources—become aligned to accomplishing organizational objectives. BSC has been increasingly applied to hospitals and healthcare organizations in high-income countries, and recently extended to low- and middle-income countries (McPake, 2016).

Table 2.2 Variations of perspectives used

Research site(s)	Country	BSC Level	Perspectives	Authors
Lawrence Hospital	USA	Corporate	Patient-value added; Business-value added for financial; Employee-value added; Business-value added for learning.	Castaneda-Mendez et al. (1998)
Sunnybrook Health Science Centre	Canada	Unit/Department	Customer satisfaction; Financial viability; internal excellence; Innovation and learning; Population types.	Gordon et al. (1998)
Mayo Clinic – Rochester	USA	Corporate	Customer satisfaction; Financial; Clinical productivity and efficiency; internal operations; Mutual respect and diversity; social commitment; Patient characteristics.; External environmental assessment	Curtright et al. (2000)
Ontario Acute Care Hospitals	Canada	Corporate	Patient Satisfaction; Financial Performance and Condition; Clinical Utilization and Outcomes; System Integration and Management Innovation.	Pink et al. (2001)
The University Hospital of Bern	Switzerland	Unit/Department	Customer; Profit.; Process; Knowledge and innovation	Zbinden (2002)
Veteran Affairs Healthcare	USA	Corporate	Customer Satisfaction; Efficiency; Access and Quality; Performance	Biro et al. (2003)
Duke University Hospital Respiratory Care	USA	Corporate	Service improvements; Finance; Clinical quality and internal business; Work culture	Thalman & Malinowski (2004)
Ontario Acute Care Hospitals, Canada	Canada	Corporate	Patient Satisfaction; Financial Performance and Condition; Clinical Utilization and Outcomes; System Integration and Management Innovation.	Yap et al. (2005)
Toronto East General Hospital	Canada	Corporate	Patient Focus; Ensure Value; Encourage People; Collaborative Spirit and Inspire Innovation	Devitt et al. (2005)
Theagenion Hospital of Thessaloniki	Greece	Corporate	Stakeholder; Financial Management; Internal Process; Learning and Growth.	Karra & Papadopoulos (2005)
Singapore Hospital	Singapore	Corporate	Customer; Process; Learning and Growth.; Supplier; IT System	Kumar et al. (2005)
Public hospital	Australia	Unit/Department	Patient; Quality and transparency; Clinical business processes; Information system	van de Wetering et al. (2006)
Changi General Hospital	Singapore	Unit/Department	‘cheaper’ indicators.; financial indicators; ‘faster’ indicators; ‘better’ indicators	Ullah et al. (2007)

Research site(s)	Country	BSC Level	Perspectives	Authors
The Capital Care Group	Canada	Corporate	Clients; Internal processes; learning and research.; People; Community partnerships	Schalm (2008)
Hoogland Medical Hospital (MHH)	Germany	Unit/Department	Customer/Patient; Finances; Process/productivity; Learning/Employee development	Aidemark & Funck (2009)
Lombardy region hospitals	Italy	Corporate	Patient satisfaction; Economy.; Clinical process; Human capital	Lovaglio (2010)
Private university hospital	Pakistan	Corporate	Patient satisfaction.; Financial; Internal business; Human resource	Rabbani et al. (2010)
St. Anna University Hospital of Ferrara	Italy	Unit/Department	Community; Financial Resources; Internal Processes; Growth and Learning.	Lupi et al. (2011)
Lebanon hospitals	Lebanon	Corporate	Clinical utilization and outcomes; financial performance and condition; system integration and human resources; patient satisfaction	El-Jardali et al. (2011)
Italian Teaching Hospitals	Italy	Corporate	Stakeholder; Financial and economic; Care; Innovation and growth.; Teaching; Research	Trotta et al. (2013)
Urban non-teaching hospital	Canada	Corporate	Patient satisfaction; Effective resource use; Staff wellbeing and productivity.; Process improvement and management	Samaranayake et al. (2016)
Italian research hospital	Italy	Unit/Department	Stakeholder satisfaction; Economic and financial.; Care processes; Research process	Catuogno et al. (2017)

Following perceived benefits proposed by Madsen & Stenheim (2014) (Table 2.3), the implementation of BSC within hospitals helps managers focus on what is important in the long run and prioritizing initiatives and decisions making. Karra & Papadopoulos (2005) reported that BSC framework provides a roadmap of actions, policies, priorities and resources to achieve mission and strategic goals. BSC also being reported to be useful for decision making in highly complex and uncertain environment, as well as effectively underlying existing problems and identifying opportunities for timely improvements (Inamdar et al., 2002; Koumpouros, 2013; Pink et al., 2003).

BSC can be used to balance the demands of internal and external stakeholders. Radnor & Lovell (2003) pointed out that BSC was not necessarily used only to focus on external stakeholders. It also targeted for enhanced transparency, clarity, accountability for public/patients, and involvement/support for staff. BSC provides a balanced view of the organization's performance, and broadens a manager's focus to take into account other issues than just financial aspects. Several authors pointed that the more balanced view has helped in reducing the over-emphasis on financial measures and assisted in shifting the focus towards a more 'holistic' and balanced view of the organization's performance (Tian Gao & Gurd, 2015; Jones et al., 2002; Rabbani et al., 2010).

The concept of BSC can be useful in communicating and visualizing the strategy in the organization. Grigoroudis et al. (2012), as well as Thalman & Malinowski (2004), argued that the concept of BSC often makes it easier to communicate the strategy to the members of organization. Other authors also argued that BSC provides a 'common language' and frame of reference, and can be a facilitator of useful discussions in the organization (Nippak et al., 2016; Rabbani et al., 2010; Samaranayake et al., 2016; A. Smith et al., 2011). In addition, Thalman & Malinowski (2004) also highlighted that the concept of BSC can facilitate useful discussions about strategies.

For the goal alignment, BSC framework enable all the members in the organization to work toward the same goal, i.e. which is referred to as goal congruence (Embree et al., 2015; D Gordon et al., 1998). This is similar to the findings of Groene et al. (2009) and Jones et al. (2002) who pointed out that BSC gives organizational members greater awareness of long-term goals, for example, balances economic considerations and social responsibility against ecological concerns, and improves understanding of how their activities affect the organization's long-term goals.

BSC can be a 'cultural tools' that changes how the organization operates and focus on the things that lead to better performance in the long run (Wachtel et al., 1999). BSC also can

be a ‘motivational tool’ that captures the attention of organizational members, which can be useful in goal-setting and for motivating employees (Tian Gao & Gurd, 2015; Thalman & Malinowski, 2004). For example, the BSC can be used to set more explicit targets than before and as an incentive to encourage appropriate behavior. Finally, BSC was highlighted that it can be used as a catalyst in organizational change processes by increasing the organizational strength (Embree et al., 2015) and useful in mobilizing staff for organizational transformation (Aidemark, 2010; Tsasis & Harber, 2008). The popularity of BSC framework as one of ‘scientific’ and sophisticated business strategic management, also helps in anticipating resistance from organization members, make it easier when monitoring the hospitals’ operations to achieve certain changes needed by hospital (Tian Gao & Gurd, 2015).

Table 2.3. Perceived benefits on BSC adoption

Theme/ Issues	Perceived Benefits	Key Findings
Managerial focus	<ul style="list-style-type: none"> <li>• Helps hospital managers focus on what is important in the long run</li> <li>• Helps hospital managers focus on prioritizing and making decisions</li> </ul>	<ul style="list-style-type: none"> <li>➤ provides a roadmap of actions, policies, priorities and resources to achieve mission and strategic goals (Karra &amp; Papadopoulos, 2005).</li> <li>➤ helps in managing organization in a highly complex and uncertain environment (Inamdar et al., 2002).</li> <li>➤ Helps in performance improvement and decision making (Pink et al., 2003).</li> <li>➤ effectively underlying existing problems and identifying opportunities for improvements on time (Koumpouros, 2013).</li> </ul>
Balancing view stakeholder demands	<ul style="list-style-type: none"> <li>• Balanced and holistic view of the organization’s performance</li> <li>• Broadens the organization’s focus to consider stakeholders</li> <li>• Makes the organization more forward-looking</li> </ul>	<ul style="list-style-type: none"> <li>➤ helps in fulfilling government expectations, and targets for enhanced transparency, clarity, and accountability for public/ patients, and involvement/ support for staff (Radnor &amp; Lovell, 2003)</li> <li>➤ provides information for evaluating performance and influencing appropriate changes to achieve the organizational goal of quality, efficient care, a nurturing work environment, and financial viability and stability (Jones et al., 2002)</li> <li>➤ provides a mechanism to evaluate success in achieving operational and quality targets while ensuring that key stakeholders are engaged in the process (Jeffs et al., 2011).</li> <li>➤ enhances social accountability for patient-centered care (Edward et al., 2015)</li> <li>➤ provides an opportunity to capture indicators in four aspects of hospital performance (Rabbani et al., 2010).</li> <li>➤ helps in achieving a better balance between economic and public benefits (Tian Gao &amp; Gurd, 2015).</li> </ul>
Communicatio n and visualization	<ul style="list-style-type: none"> <li>• Common language</li> <li>• Common frame of reference</li> <li>• Facilitates discussions</li> </ul>	<ul style="list-style-type: none"> <li>➤ assists management in clarifying and gaining consensus about strategy, performing periodic and systematic strategic review, and providing feedback to evaluate and improve strategy (Grigoroudis et al., 2012).</li> <li>➤ provides a different way of framing the evaluation, ensuring measurable outcomes were connected to inputs and outputs (Samaranayake et al., 2016).</li> </ul>

Theme/ Issues	Perceived Benefits	Key Findings
		<ul style="list-style-type: none"> <li>➤ useful tool for performance reporting and management tool (Nippak et al., 2016).</li> <li>➤ can improve staff understanding. Smith, A., et al. (2011)</li> <li>➤ helps in measuring the impact of department services and provides additional feedback of the performance of strategic initiatives important (Thalman &amp; Malinowski, 2004).</li> <li>➤ facilitates rational organization and management of data collection systems and serve as an evaluation framework for monitoring improvement of clinical outcomes and quality (Rabbani et al., 2010).</li> </ul>
Alignment of goals	<ul style="list-style-type: none"> <li>• Helps improve goal congruence</li> <li>• Increased awareness of how the organization's long-term goals</li> </ul>	<ul style="list-style-type: none"> <li>➤ connects the mission and the outcomes of organizations program (Embree et al., 2015).</li> <li>➤ helps in defining objectives and associated performance indicators (D Gordon et al., 1998).</li> <li>➤ improves quality of healthcare quality (Lupi et al., 2011).</li> <li>➤ balances economic considerations and social responsibility, and ecological concerns (Groene et al., 2009)</li> <li>➤ support organization to survive and thrive while serving the healthcare needs of community (Jones et al., 2002).</li> </ul>
Cultural and motivational tool	<ul style="list-style-type: none"> <li>• Better leadership</li> <li>• Captures the attentions of organizational members</li> <li>• Motivational effects as a result of more explicit targets and incentives</li> </ul>	<ul style="list-style-type: none"> <li>➤ BSC provides a different mindset for key leadership to look at the organization in a global sense (Wachtel et al., 1999).</li> <li>➤ affects the behavior of the employees (Thalman &amp; Malinowski, 2004).</li> <li>➤ helpful in development and implementation of a national standardized performance indicators (El-Jardali et al., 2011).</li> <li>➤ helps in achieving a balance between patient needs, hospital development and staff motivation (Tian Gao &amp; Gurd, 2015).</li> </ul>
Organizational change catalyst	<ul style="list-style-type: none"> <li>• Can be used to justify organizational changes</li> <li>• Well-known concept</li> </ul>	<ul style="list-style-type: none"> <li>➤ can be a strategy that increases organizational strength (Embree et al., 2015).</li> <li>➤ mobilizes staff for organizational transformation (Tsasis &amp; Harber, 2008).</li> <li>➤ a more 'scientific' and sophisticated system for monitoring the hospitals' operations (Tian Gao &amp; Gurd, 2015).</li> </ul>

Time-consuming was the biggest issue found by authors in adopting and implementation of BSC within hospitals as shown in Table 2.4 (Aidemark & Funck, 2009; Chow et al., 1998; Groene et al., 2009; Nippak et al., 2016; Verzola et al., 2009). In addition, Baker & Pink (1995) stated that implementation of BSC needs a continuous investment in human resources. Availability of data for developing baseline data performance indicators and for benchmarking purposes were the next challenges (Devitt et al., 2005; Hall et al., 2003; Lupi et al., 2011; Thalman & Malinowski, 2004; Trotta et al., 2013).

Several authors such as Chen et al. (2006), Hall et al. (2003), Lorden et al. (2008), and Lupi et al. (2011) emphasized that difficulties and complexities in designing BSC were also challenges in adopting BSC. Amongst difficulties and complexities indicated are failure in

choosing effective key performance indicators, questions regarding the reliability of measures and indicators, measures of satisfaction for both employees and customers, and choosing appropriate indicators and indicators/measures' weights.

Adoption of BSC within hospitals also needs concerns for role involvement of stakeholders, executives, and professional workers. Aidemark & Funck (2009), for example, reported challenge on the lack of involvement from medical professionals in development and implementation in Sweden, a high-income country in Europe. Their findings are similar to those within lower-middle income setting as reported by Rabbani et al. (2010). Lack of understanding of actors involved (Biro et al., 2003) and lack of access to information (Rabbani et al., 2010) were also challenges. Therefore, standardized guidelines to support the design and the adoption of BSC is needed (Catuogno et al., 2017). Rabbani et al. (2010) and El-Jardali et al. (2011) ended their report with the same conclusion regarding cultures, such as hierarchical culture and physician resistance, as one of the constraints in adoption BSC in Pakistan and Lebanon (El-Jardali et al., 2011). Rabbani et al. (2010) also added committed leadership as one of the pre-requisites in adopting BSC in Pakistan. The challenges in the adoption of BSC discussed in previous studies are summarized in Table 2.4.

Table 2.4 Challenges in BSC adoption

Issues	Key findings and authors
Cost-benefit factor	<ul style="list-style-type: none"> <li>• Time consuming (Aidemark &amp; Funck, 2009; Chow et al., 1998; El-Jardali et al., 2011; Groene et al., 2009; Nippak et al., 2016; Verzola et al., 2009)</li> <li>• Major investment of resources including HR (Baker &amp; Pink, 1995)</li> </ul>
Resources (data, IT/IS, HR)	<ul style="list-style-type: none"> <li>• Data availability (Devitt et al., 2005; El-Jardali et al., 2011; Hall et al., 2003; Lupi et al., 2011; Rabbani et al., 2010; Trotta et al., 2013)</li> <li>• Information technology systems (El-Jardali et al., 2011; Trotta et al., 2013)</li> <li>• Lack of designated HR (Rabbani et al., 2010)</li> </ul>
Design Complexity	Questionable feasibility of measures and indicators, e.g. key performance indicators, measures' weights, Measure of satisfaction for both employee and costumer (Chen et al., 2006; Hall et al., 2003; Lupi et al., 2011)
Role involvement	<ul style="list-style-type: none"> <li>• Lack of role awareness and involvement (Aidemark &amp; Funck, 2009; Rabbani et al., 2010)</li> <li>• Lack of understanding (Biro et al., 2003)</li> </ul>
Culture and Individual	<ul style="list-style-type: none"> <li>• Physician resistance (El-Jardali et al., 2011)</li> <li>• Lack of Interest and Hierarchical culture (Rabbani et al., 2010)</li> <li>• Difference individual backgrounds of managers (Naranjo-Gil, 2009)</li> </ul>
Communication	Lack of access to information (Rabbani et al., 2010)
Knowledge transfer	Need for guidelines to support the design and the adoption of the BSC provided by government (Catuogno et al., 2017)
Leadership	Derogatory leadership (Rabbani et al., 2010)
Organizational structure	Non-uniformity of the organization (Verzola et al., 2009)
Benefit Utilization	Linking information generated from BSC into action, e.g. linking of budget and planning process (Baker & Pink, 1995; Thalman & Malinowski, 2004)



## 2.6 Summary

Success in initial adoption of BSC within public hospital depends on the seriousness of hospitals' management to put their attention on investments of technologies, human capital, and time. Thus, ensuring the availability of resources that have the skills in strategic hypotheses formulation, data analysis, and data management would be necessary. Next is building active involvement of the executives and stakeholders. Involvement of government and external parties such as consultants or/and university experts would be valuable in the development phase. For non-high-income countries, Rabbani et al. (2010) suggested that committed leadership, cultural readiness, quality information systems, viable strategic plans, and optimum resources, would be pre-requisites in adopting and implementing BSC within hospitals.

Caution should also be addressed regarding BSC as a strategic management rather than measurement system. Thus, continues review and revision of the scorecards are encouraged to ensure that BSC is valuable for decision-making process. The adoption of BSC is aimed to help hospitals in seeking for balance and harmony between long-term and short-term, financial and non-financial, individual and organizational, internal and external factors, cause and effects, as well as efficiency. However, since lives are difficult to balance and most countries are struggling to contain health costs (Gurd & Gao, 2007), it may be necessary to put patient needs at the top among the perspectives (Catuogno et al., 2017; Devitt et al., 2005; Tian Gao & Gurd, 2015).

Despite the facts that BSC is time-consuming and also required intensive exercises (Hoque, 2012), non-HIC hospitals such as Indonesian public hospitals should consider the adoption of BSC. Most studies on BSC adoption and implementation reveal about benefits to hospitals such as improvement on managerial focus, a balanced view of financial and non-financial performance indicators, goals congruence, cultural and motivational tool, and catalyst of changes needed by hospitals. A gradual approach<sup>2</sup> suggested by El-Jardali et al. (2011) and Rabbani et al. (2010) would be an appropriate reference when adopting BSC in non-HICs setting.

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<sup>2</sup> will be discussed further in Chapter 6

### **Chapter 3**

## **LITERATURE REVIEW ON ORGANIZATIONAL CULTURE**

Research on how public sector organizations, particularly within hospitals, adopt performance measurements have been discussed in the previous chapter. Findings from the studies conducted by El-Jardali et al. (2011) and Rabbani et al. (2010) emphasize that in non-HIC setting, BSC should be adopted gradually with readiness and cultural assessment as prerequisites.

This chapter aims to examine organizational culture and discuss how it affects organizational performance. First, the definition and evolution of organizational culture in the literature was reviewed, then followed by a discussion of the Competing Values Framework (CVF) which introduced four types of organizational culture, namely clans, markets, adhocracy, and hierarchy.

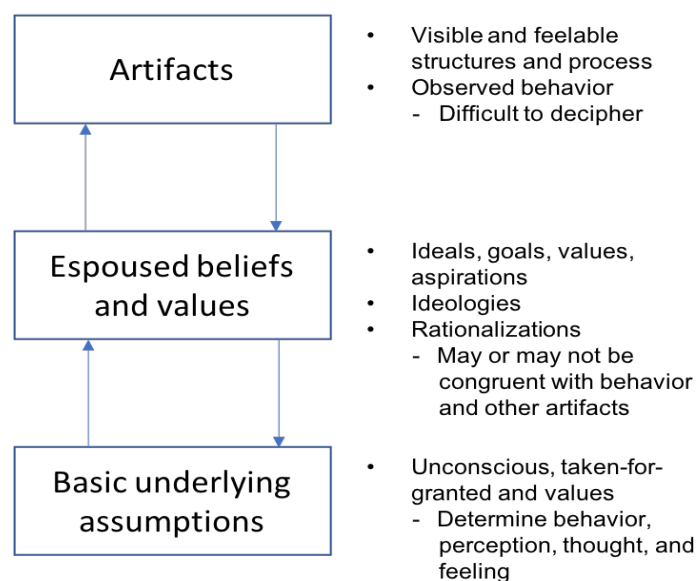
### **3.1. Organizational culture**

#### **3.1.1. Definition of organizational culture**

The term ‘culture’ is widely used in various fields such as anthropology, sociology, ethnology, politics, economics, management and so on. Within the disciplines, culture is also defined in a variety of ways to fulfill specific objectives. The definitions include, for example, how culture distinguishes humans from animals, one community from other communities, or in geographical contexts. In addition, there are also definitions of cognitive aspects, which are used to explain culture in terms of ideas, values, and knowledge (Ross, 2004). Although culture is conceptually difficult to define because of its broad scope, the cognitive aspects show that ideas, beliefs, and knowledge shape organizational culture (Petrock, 1990). Organizational culture is a social reality, that is socially constructed and rooted in firmly held perceptions, values, beliefs, or expectations that are owned by, and unique to, certain organizations (Hofstede et al., 1990; Hudelson, 2004). This statement is in line with the views of Cooke & Rousseau (1988), Cooke & Rousseau (1988), and Wilkins & Ouchi (1983) who highlighted that shared values and beliefs produce norms of behavior or expectations which significantly influence employee behaviors and attitudes, and that the differences in culture help in explaining relevance within work attitudes, behaviors, and practices (Dastmalchian et al., 2001; Hofstede et al., 2010). In other words, organizational culture is the way organizations do things (Deal & Kennedy, 1985).

Schein (2010) classifies cultural models into three levels, namely artifacts, espoused beliefs and values, and basic underlying assumptions (Figure 3.1). At the surface level, organizational artifacts supported by their value are defined as the most tangible features or creations and consist of the physical and social environment in which the organization is situated. Examples of cultural artifacts in organizations are symbols, slogans, uniforms, logos, members' open behavior, ceremonies, and stories. Espoused beliefs and values represent visible aspects of culture that are based on employee collective opinions and past experience. This level of culture can be defined as the strategy, goals, code of ethics, morals and ideology of the organization. The basic assumptions level is hidden beneath artifacts and values and is tacitly accepted as an organizational standard perspective, although these factors are difficult to access (Linstead et al., 2009). It is the basic source of organizational values and artifacts and includes the beliefs, perceptions, thoughts, and feelings received. Basically, these three levels of organizational culture establish the idea that organizational culture consists of values, beliefs, and assumptions as intangible features, and artifacts as tangible ones. This study adopts the definition of Schein's (2010) organizational culture (Figure 3.1) as "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 2010)."

Figure 3.1 Schein's three levels of culture



Source: adopted from Schein (2010, p. 24) and Hatch & Cunliffe (2013, p. 168)

### **3.1.2. Perspectives on organizational culture**

According to Hatch & Cunliffe (2013, p. 48), organizational culture can be seen from three different perspectives, namely modern, symbolic, and postmodern. In modern perspective, organizational culture is defined as a product of group collective learning processes and problem-solving as a way of aiming to survive well in an organization with adaptations needed for external conditions (Schultz, 1995). The modernists view organizations as independent organisms whose function is to improve the effectiveness and efficiency of system performance, so that organizational culture is the answer when asked which instruments are best applied to organizational activities (Barney, 1986; Denison, 1996; Saffold III, 1988; Wilkins & Ouchi, 1983). Smircich (1983) argues that culture is understood as an independent variable that influences the development and strengthening of values, attitudes, and actions of organizational members. In addition, Allaire & Firsirotu (1984) stated that culture is an organizational instrument that helps workers to overcome the problem of meeting basic needs through work.

Researchers within modern perspective are usually interested in investigating what types of culture are most effective in achieving relevant results. Chua (1986) reported that organizational culture helps an organization to survive, and therefore, congruence between the adopted and the desired culture is crucial for the organizational effectiveness in pursuing their objectives. Garnett et al. (2008) found that organizations with a mission-oriented culture prioritize goals and results, while those who have a rule-oriented culture prioritize compliance, structure, and regulation. Thus, different cultures can be tools in achieving different organizational goals, but this differential effect depends on other elements and processes in the organization.

Deshpande & Webster Jr. (1989) refer to this approach as a form of contingency management embedded in functionalist sociology in line with traditional contingency frameworks that challenge best organizational practices. Those who support this approach claim that the most appropriate way to design and manage an organization will depend on the characteristics of the situation in which the organization finds itself (Donaldson, 2001; Hatch & Cunliffe, 2013). To get optimal results, both the characteristics of the internal organization and the existing external situation must be consistent with the organizational culture. Therefore, a functionalist perspective claims that culture is a vital instrument that influences organizational outcomes.

Symbolic perspectives claim that organizations are managed by human interaction, and are considered as places where meaning is collectively created and coded. In social construction theory, the symbolic researchers claim that humans and their social environment can only be understood from the viewpoint of those who directly experience the environments (Iivari, 2002). McAuley et al. (2006) argues that subjective understanding of reality is formed through symbolic interpretation, which allows people to create meaning. Nonetheless, the main purpose of a symbolic/interpretive perspective is to produce shared meaning through symbols and tangible and intangible elements of specific understanding. Therefore, symbolic orientation views organizations as human systems that express patterns of symbolic action and focus on how organizational members make meaning through negotiation and interaction. The purpose of this orientation is to evaluate the shared interpretation of the situation as subjective and intersubjective experience so that coordinated action may be in a certain context (Smircich, 1983).

The post-modernist perspective is a critical approach with the aim of "Appreciating and/or deconstructing organizational texts so as to reveal managerial ideologies and destabilize modernist modes of organizing and theorizing; favors marginalized and oppressed viewpoints; encourages reflexive and inclusive forms of theorizing and organizing (Hatch & Cunliffe, 2013, p. 15)." The perspective challenges elements rooted in the organization by claiming that all knowledge of organizational culture is a product of power relations within organizations. McAuley et al. (2006) said that the postmodernist approach mainly investigates the negative characteristics of organizational culture and is likely to counteract the accepted beliefs and values which may restrict individual autonomy.

The difference between modernist and symbolic perspectives on organizational culture stems from the way they define knowing and what is perceived as knowledge about culture (Hatch & Cunliffe, 2013, p. 192). Modernist interprets culture as a management tool, and culture itself is a variable that will be manipulated to increase the likelihood of achieving the desired level of organizational performance. Symbolic perspectives, on the other hand, define culture as a context for creating meaning and interpretation so that an organization can be understood by its physical, behavioral, and verbal symbols (contextual situations). This study adopts a modernist stance that believe culture can influence organizational outcomes. Symbolic and postmodern perspectives are not considered as the appropriate approach for this study in terms of their scope in

the literature or subject discussed in this study. Unlike the symbolic approach, current studies do not attempt to understand what culture and performance mean to people in organizations from a subjective point of view, nor do they approach these concepts through a critical examination of postmodernist cultural discourse in organizations. In the approach of this paper, the literature proposes a variety of cultural typologies that can be used to investigate the relationship between types of culture and other related organizational elements.

It is widely believed that the complexity of cultural concepts can be reduced by identifying and conceptualizing them in a comprehensive framework (Cameron & Quinn, 2011). Based on this belief, organizational culture conforms to a variety of ideal types that include different sets of dimensions (George G Gordon, 1985; Martin, 1992; Sathe, 1983). Many of culture typologies have been introduced by scholars such as Harrison (1972) who built four types of culture, namely Apollo (role culture), Zeus (culture of power), Athens (task culture), and Dionysian (atomistic culture). Deal and Kennedy (1982) also set four types of culture, i.e. tough men (fast feedback / high risk), betting your company (slow feedback/high risk), work hard-play hard (fast feedback/low risk), and process culture (slow feedback/low risk). Quinn & Rohrbaugh (1983) introduced rational cultural/internal processes/open systems/human relations, which were later modified by Cameron & Quinn (2011) with market/hierarchy/adhocracy/clan types within a framework called “The Competing Values Framework (CVF).” CVF was chosen in this study because it has a strong theoretical background and has become the most widely used in typology by researchers who interested in empirical relationships between organizational performance and culture (Grabowski et al., 2015; Hajnal, 2004; Prajogo & McDermott, 2011).

CVF consists of a combination of focus and structure dimensions that refer to the process (activities) and objectives of organizations. The framework shows that a culture type is expected to relate to different effectiveness indicators of organization as a function of their basic assumptions, values, and structures (Hartnell et al., 2011). Because this study examines the culture and performance of organizations from a functionalist perspective, CVF suits the purpose of the study. CVF has been administered in more than 10,000 organizations globally in assessing organizational culture (Cameron & Quinn, 2011). However, very little research has focused on the relationships of CVF and the acceptance, the perceived importance, and the use of performance measurement systems in the public sector. In the Turkish context, the framework is only applied in one paper

that examines culture and performance relations in health organizations (Acar & Acar, 2014). For this reason, this study may contribute on the relationship between the culture types within CVF and the performance measurement system in the public sector.

### **3.1.3. Organizational Culture as organizational contingency factor**

Since the 1980s, organizational culture in the public sector has begun to shift from traditional, rule-based, hierarchical, and process-driven bureaucratic culture to a competition-based, market-oriented, and results-oriented business culture. This reform movement is widely referred to as New Public Management (NPM), and spread to other countries largely due to international organizations such as the World Bank, OECD and the United Nations (Elias Sarker, 2006; Walle & Hammerschmid, 2011). As a result, the culture of public organizations became a topical issue. Newman (1994) suggested that culture may improve public service organizations. Therefore, leaders on a public service organization should recognize their organization's culture values. Furthermore, the leaders should find out more on the culture that can leverage their organizational performance.

Organizational culture can be a potential source of sustainable competitive advantage (Barney, 1986; Fey & Denison, 2003; Yu & Wu, 2009), but, at the same time, can be counterproductive and undermine organizational performance (Alder, 2001). When culture is not compatible with changes in business environments, it can cause resistance and failure (Schwartz & Davis, 1981). If management adopts Western change practices, such as BSC, which are contrary to the prevailing organizational culture, negative attitudes and resistance will certainly follow. On the other hand, employees will likely embrace new practices and procedures which are consistent with organizational culture (Alder, 2001). Hence, culture can be positive or negative to organizational effectiveness.

Organizational culture has been considered as a contingency factor in organizations. The contingency theory argues that the best approach in management is an approach that fits the situation, and depends on a set of variables in a particular situation (Rompho, 2006, p. 335). In the context of accounting system, Otley (2001a, p. 413) stated that "particular features of an appropriate accounting system will depend upon the specific circumstances in which an organization finds itself." The main idea of contingency theory is that organizational success resulted from the appropriate characteristics of the organization, namely from its structure to contingencies that reflect

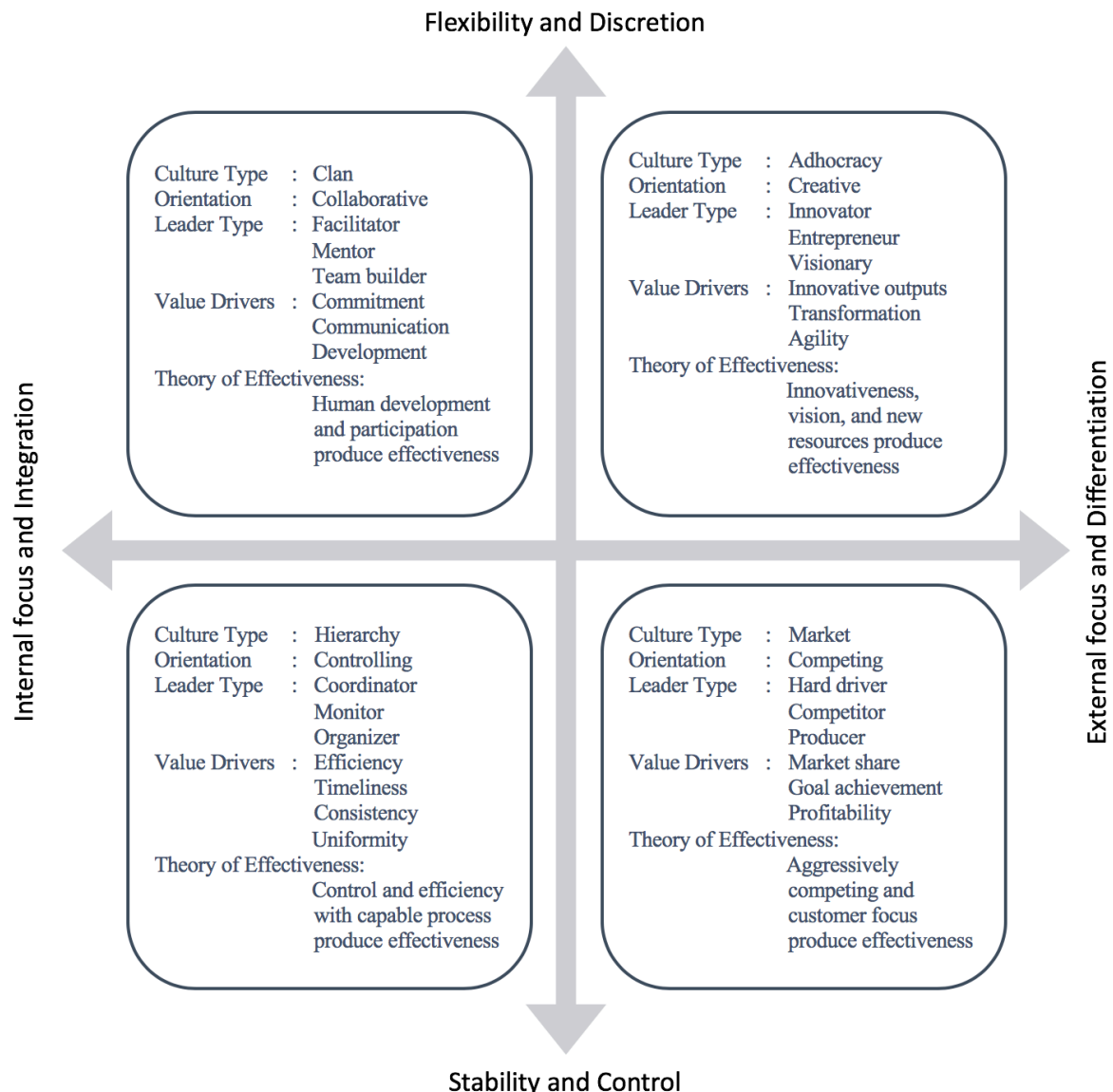
the organization's situation. Aligned with this theory, Groysberg et al. (2018) state that performance is a consequence of the compatibility between various factors including structure, people, technology, strategy, and culture, while Stare (2012) argues that organizational culture is one of the most influential dimensions of the work climate and is the main driving force of a business. Their argument supports Daft's (2016) recommendation that organizations must consider culture when it is required to adapt to the rapid changes in the business environment, and also Chenhall's (2003) opinion that culture is believed to be an influencer of management control systems or performance management systems. Sociologically, different cultures have certain characteristics and results, makes individuals respond differently in the management control system (MCS)/performance management system (PMS). Therefore, organizations must consider culture in the development of effective MCS. This situation explains the reasons behind the placement of research related to culture as a broad research subject (Chow et al., 2002). In MCS/PMS research, culture is often investigated in many studies with national cultural themes, e.g. Awasthi et al. (1998) and Chow et al. (2001). However, organizational culture as part of an organizational subject might be more relevant and more important compared to the national culture in the context of PMS design (Chenhall, 2003).

### **3.2. The Competing Values Framework**

Cameron & Quinn (2011, p. 38) identify two main dimensions related to organizational culture, which are then put into a quadrant called "The Competitive Value Framework." The first dimension is related to flexibility and discretion versus stability and control, and the second dimension is related to internal and integration orientation versus external and differentiation orientation. The two dimensions result in four different cultures type (Figure 3.2). Firstly, clan culture which refers to organizations that are more like extended families than economic entities. Secondly, adhocratic culture that relates to the ethos of an organization that concentrates on external positions with a high degree of flexibility and individuality. Thirdly, hierarchy culture that refers to organizational culture concentrating on internal maintenance with the need for stability and control in their management and structure. The fourth one is market culture which refers to the type of organization that functions as a market itself. Market culture refers to organizations that focus on external maintenance with the need for stability and control.



Figure 3.2 The Competing Values Framework



Source: Adopted from Cameron & Quinn (2011, p. 53)

#### 1) Clan culture

Clan culture is characterized by teamwork, loyalty, trust, and support (Demir et al., 2011), where organizations are often compared to extended families. Clan culture concern more about the development and involvement of human resources compared to hierarchy, market, and adhocracy cultures. The main task of leaders and managers in this culture is to empower staff and encourage their participation, commitment, and loyalty. Therefore, leaders are seen as mentors or parents. Rewards are given based on team rather than on an individual achievement basis. At the same time, external focus for employees and organizational performance is also emphasized (Cameron & Quinn, 2011).

Organizations with clan cultures can quickly adapt to rapidly changing environments since they are tied to their shared values, beliefs, and goals, which make the company more adaptable (Cameron & Quinn, 2011). Japanese companies showed great success in building and managing clan culture in the workplace.

Clan culture, which is in the upper left of CVF, is characterized by focus/integration and internal flexibility. Since it is characterized by orientation on collaboration, organizations with clan culture show a high degree of commitment, cohesion, loyalty, and tradition. Hartnell et al. (2011) mentioned that human affiliation, which is characterized by clan culture, generates favorable employee attitudes toward organizations.

The underlying assumption of clan culture is that human affiliation produces favorable employee-oriented organizational attitudes (Hartnell et al., 2011). As organizational attributes and behavior, teamwork, participation, and open communication are expected to produce results from commitment, satisfaction, and better quality of work (Cameron & Quinn, 2011).

## 2) Adhocracy Culture

Adhocratic culture is characterized by flexibility, change, and openness. This culture emphasizes rapid growth, creativity, innovation, experimentation, and risk taking (Hartnell et al., 2011) with visionary, innovative, and risk-oriented leadership styles (Cameron & Quinn, 2011). Staffs are rewarded for their success in self-realization and are expected to be more enterprising and creative. Organizations with adhocracy culture emphasize innovation which they perceive as having the inherent ability to generate new resources and higher profits, in contrast to cultures that rely on procedures, centralized power, and collectiveness (Cameron & Quinn, 2011). In addition, Cameron & Quinn (2011) said that organizations with an adhocracy culture can easily adapt to rapidly changing business environments since the organization is designed to react on an ad-hoc basis that is helpful in facing uncertainty, ambiguity, and impermanence conditions. Many organizations, including public sector organizations, have moved to adhocracy culture since the culture is suitable for answering the increasing public demand regarding effectiveness, openness, and accountability (Cameron & Quinn, 2011).

In CVF, the adhocracy culture position is in the upper right, and it is characterized by external focus and flexibility. Cameron & Quinn (2011) argue that adhocratic organizations are considered to value growth, stimulation, variation, autonomy, and attention in detail. With attributes such as risk-taking, creativity, and adaptability,

adhocracy cultures are expected to foster innovation and breakthrough results (Denison & Spreitzer, 1991).

### 3) Hierarchy Culture

Hierarchy culture emphasizes stability, certainty, efficiency, and coordination. The culture can be found in an organization that emphasizes order, procedures, rules, and regulations (Cameron & Quinn, 2011). Leaders and managers in organizations with a hierarchy culture are characterized by well-coordinated, well-organized, and conservative styles. Cameron & Quinn (2011) explained that the hierarchical organization's long-term concern is stability and performance as well as efficient and smooth operation. Organizations are run on the basis of formal rules and policies.

Max Weber's bureaucratic model is considered as the earliest and most enduring forms of organization in modern times (Walton, 2005). Weber's (1947) model is well-known for its seven features of bureaucracy, i.e. organizations should be rules-based, specialized, meritocratic, hierarchical, separate ownership, impersonal, and accountable, which are believed to foster efficiency, reliability, and predictability regarding the creation of organizations' outputs. Government institutions are mostly run on the hierarchical culture, however, large private organizations also adopt this culture since it is needed for integrating their activities (Cameron & Quinn, 2011).

In CVF, hierarchy culture is put on the lower left, thus characterized by internal focus/integration and stability. Its underlying assumptions lie on control, stability, and predictability that foster efficiency. Its main attributes, i.e. proper communication, routine, formalization, and consistency (Cameron & Quinn, 2011) are expected to promote efficiency, timeliness, and smooth function (Hartnell et al., 2011).

### 4) Market Culture

Market culture is characterized by accomplishment and competitiveness, external satisfaction and efficiency. Leaders and managers within organizations with a market culture tend to direct, goal-oriented, results-oriented in their style (Cameron & Quinn, 2011; Ferreira, 2014). Such organizations have a long-term focus on competitiveness and define success in terms of market share and penetration (Cameron & Quinn, 2011).

Market culture assumes that the customers are selective and prioritizing quality. Customers have the freedom to choose the services that they will buy. Therefore, organizations should be market-oriented by increasing their competitive advantage. Market culture confirms that a clear goal and aggressive strategy will generate profits (Cameron & Quinn, 2011).

In CVF, the market culture is on the lower right, thus characterized by external focus and stability. Market culture assumes that focus on achievement will foster competitiveness and aggressiveness, resulting in short-term and immediate productivity, external satisfaction and shareholder value (Cameron & Quinn, 2011; Helfrich et al., 2007).

The main belief of market culture is that clear targets and contingent rewards motivate employees to perform and meet stakeholders' expectations aggressively. Market-oriented organizations value communication, competence, and achievement. Behavior related to these values consists of planning, focus on tasks, centralized decision making, and clear articulation of goals. Such an approach would allow the organization to defeat its competitors, meet its targets, and increase its market share and profitability (Hartnell et al., 2011) (Table 3.1).

Table 3.1 CVF cultures' assumptions, belief, values, artefact and effectiveness criteria

<b>Culture type</b>	<b>Assumptions</b>	<b>Beliefs</b>	<b>Values</b>	<b>Artefact (behaviors)</b>	<b>Effectiveness Criteria</b>
Clan	Human affiliation	People behave appropriately when they have trust in, loyalty to, and membership in the organization.	Attachment, affiliation, collaboration, trust, and support	Teamwork, participation, employee involvement, and open communication	Quality
Adhocracy	Change	People behave appropriately when they understand the importance and impact of the task.	Growth, stimulation, variety, autonomy, and attention to detail	Risk-taking creativity, and adaptability	Innovation
Market	Achievement	People behave appropriately when they have clear objectives and are rewarded based on their achievements.	Communication, competition, competence, and achievement	Gathering customer and competitor information, goal setting, planning task focus, competitiveness, and aggressiveness	Customer Satisfaction
Hierarchy	Stability	People behave appropriately when they have clear roles and procedures are formally defined by rules and regulations.	Communication, routinization, formalization, and consistency	Conformity and predictability	Quantity

Source: adopted from (Hartnell et al., 2011)

### 3.3. Culture and performance

Cameron & Quinn (2011, p. 175) confirmed that hierarchy and clan cultures are likely appear in organizations than adhocracy or market cultures. A study by Adams et al. (2017) in Australian tertiary referral hospital found that, although employees perceived a hierarchical culture type, they preferred a future culture that put more attention on collaboration, or clan, culture. Rabbani et al. (2009) also found the similar type of culture at a tertiary hospital in Pakistan.

Cultures were mostly studied with a focus on their relationship with either overall or specific healthcare performance. As highlighted in Table 3.2 clan culture is identified to be positively related to the public healthcare performance as reported by van Beek & Gerritsen (2010). Hierarchy culture is found to more positively related to hospital performance than market or clan cultures as reported by Acar & Acar (2014) and Gerowitz et al. (1996), while Zazzali et al. (2007) and Shortell et al. (2001) concluded that hierarchy culture was negatively related to healthcare performance. In addition to the hierarchy, van Beek & Gerritsen (2010) also reported that there is no relationship between hierarchy culture and quality of care. Adhocracy culture was reported to be relevant to the healthcare performance by Gerowitz et al. (1996), while Zazzali et al. (2007) and (van Beek & Gerritsen, 2010) suggested that there is no relationship between adhocracy culture and quality of care. Regarding the market culture, Gerowitz et al. (1996), Jacobs et al. (2013), and Ferreira (2014) found that the culture was positively and significantly related to resource acquisition, market share and competitiveness, and customer capital.

Table 3.2 Empirical research on the relationship between CVF's cultures and healthcare performance

Author(s)/ Year	Country	Findings
Gerowitz et al. (1996)	US, UK and Canada healthcare	Performances of top management team were positively and significantly related to clan, market, and adhocracy culture.
Gerowitz (1998)	US healthcare	Culture is related to performance, but total quality management interventions are not related to culture or performance changes.
Shortell et al. (2000)	US healthcare	There is no correlation between culture and performance.
Goodman et al. (2001)	US healthcare	Clan culture is positively related to employee commitment, work involvement, empowerment, and job satisfaction and is negatively associated with turnover. Hierarchy culture is negatively related to commitment, work involvement, empowerment, and job satisfaction and positively related to intention to turnover.

Author(s)/ Year	Country	Findings
Shortell et al. (2001)	US healthcare	There is no connection between culture and evidence-based care due possibly to amorphous nature of physicians' associations.
Mannion, R. et al. (2005)	UK healthcare	Acute beliefs with a culture of adhocracy are more likely to be highly valued. Trust with cultural hierarchies is more likely to perform well at waiting times; clan culture scores better on satisfaction.
Zazzali et al. (2007)	US healthcare	Clan culture is positively related to satisfaction with staff and human resources, technological sophistication, and price competition. Market culture is negatively associated with satisfaction with staff and human resources and price competition.
Prenestini and Lega (2013)	Italian healthcare	Hierarchical culture is negatively related to satisfaction with managerial decision making, the level of competition practice, price competition, and financial ability. Adhocratic culture is not statistically significant with any of satisfaction measures.
Gregory (2009)	US healthcare	Clan culture is associated with staff satisfaction and adhocracy towards external stakeholder satisfaction. Hierarchy is negatively related to efficiency and financial performance. Market culture correlates with better performance in the quality of care compared other CVF's cultures.
Rabbani et al. (2009)	Pakistan hospital	Hierarchical culture is negatively correlated with the three hospital's improvement domain, i.e. leadership, information and analysis, and employee satisfaction. While group (clan) and developmental (adhocracy) is positively with the domains.
Van Beck and Gerritsen (2010)	Netherlands healthcare	Clan culture is positively related to patient satisfaction and controllable costs. A balanced culture reaches a higher level of patient satisfaction than an unbalanced culture.
Jacobs, et al., (2013)	UK healthcare	Higher performance organizations tend to be grouped in an adhocratic culture. The high performing hospitals with greater financial and managerial autonomy tend to be increasingly grouped in market culture. Clan culture and adhocracy also tend to be specialist hospitals with the idea that this organization is more innovative and entrepreneurial. Clan culture is also strongly associated with smaller organizations where staff cohesion and morale may be easier to maintain.
Acar and Acar (2014)	Turkish healthcare	Market culture has no effect on financial performance within Turkish public hospitals. The Turkish hospitals are dominantly hierarchical, followed by market and clan cultures. Better financial performance is difficult to achieve under clan culture.
Ferreira (2014)	Portuguese technological sector, healthcare, several service areas (banking, transportation, electric)	Adhocracy culture has a stronger positive and significant relationship to hospitals' capital structure than clan, hierarchy, and market. Clan culture has a more positive relationship with a higher perception of investment in human capital than other cultures. Market culture is negatively related to human capital but positively to customer capital.

This study will investigate the influence of culture on the acceptance, importance and use of performance measurement system that incorporate financial and non-financial in hospital.

Unfortunately, to the best of my knowledge, no studies have been conducted within hospital setting. However, within commercial companies, Mardiana et al. (2018) reported that in an Indonesian IT-based company, clan culture dominantly influences the innovation and adoption of new technology by the company.

### **3.4. Summary**

This chapter has outlined organizational culture and its perspectives. Cultural typology based on CVF and related studies within healthcare organization setting were also described. Empirical research review results showed that CVF has a theoretical basis into the culture - performance relationship within healthcare organizations. Unfortunately, no studies can be reviewed regarding the cultures' influence on the adoption of PMS.

Results of literature review showed that clan culture has positive relationship with the healthcare performance. Similarly, adhocracy culture was reported significantly influencing innovation. Market culture shows various results. However, it can be generalized that that market culture plays an important role in increasing satisfaction of patients and other stakeholders. Hierarchy culture was found mostly to be negative relationship with the financial performance, customer and employee satisfaction, as well as work involvement.

In the next chapter, research framework and hypotheses will be developed based on empirical findings described in this chapter and Chapter 2.

## **Chapter 4**

### **INDONESIAN PUBLIC HOSPITALS**

This chapter contains the Indonesian context of the national health system and public hospitals. It describes historical development and recent situation of the Indonesian health system<sup>3</sup> and public hospitals in particular. Performance management of the public hospitals, including the use of BSC as their performance tool measurement and strategy, is discussed at the end of the chapter.

#### **4.1. Introduction**

The World Health Organization (WHO) defined health system as all the activities whose primary purpose is to promote, restore, and maintain health to prevent household poverty due to illness, by delivering preventive, promotive, curative and rehabilitative interventions through a combination of public health actions and health care facilities (WHO, 2000; World Bank, 2007). The health system is not only limited to a set of institutions that regulate, finance, or provide services, but also includes various groups of organizations that provide input to health services, especially human resources, physical resources (facilities and tools), and knowledge/technology. These organizations include universities and other educational institutions, research centers, construction companies, and a series of organizations that produce specific technologies such as pharmaceutical products, tools, and spare parts.

Indonesia is the largest archipelagic country in the world, with a population of more than 240 million and its population is ranked fourth in the world in terms of population density. According to economic status, Indonesia is classified into a middle-to-lower-income country. In 1998, Indonesia experienced dramatic changes in governmental and political systems, namely the transition from the New Order Era that lasted 32 years to the Reformation Era with reformed democracy. These changes also have significantly influenced its National Health System (NHS) (Mahendradhata et al., 2017).

Indonesian Presidential Regulation Number 72/2012 concerning The National Health System defined the national health system as health management organized by all components of Indonesian communities in an integrated and mutually supportive manner to ensure the achievement of the highest degree of public health (GOI, 2012). According to the regulation, health system is carried out through the management of administration, information, resources,

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<sup>3</sup> The term of health system is also known as health sector. The two terms will be used interchangeable.



efforts, financing, community participation and empowerment, and science and technology, in the health sector, as well as health law arrangements in an integrated and mutually supportive manner to ensure the achievement of the highest degree of public health.

Under the regulation, several essential responsibilities in implementation of health services have been transferred to local governments at the district and municipality level, together with almost a quarter million health workers. Districts and municipalities have major responsibilities for delivering health services and allocating resources. At the sub-district/municipality level, Puskesmas<sup>4</sup> (community health centers) have been playing important role of essential health services and primary care since the 1970s, while district/municipality-level hospitals are the primary providers of curative care. Curative services are provided by four types of hospitals ranging from teaching hospitals in the country's major cities to district-level hospitals where all primary services are provided, and referrals are made for more complicated cases to the higher-level hospitals. In the 1990s, the private sector was encouraged to take on a more important role in delivering health services. This led to growth in the number of private hospitals and emergency-trained midwives, which was expected to support themselves by charging fees for service.

#### **4.2. Indonesian healthcare system**

The development of the health sector in Indonesia originated from the non-profit private sector. In the colonial period, the Dutch East India Company established a hospital in Batavia (now Jakarta) in 1626. This hospital was built to maintain the health of the soldiers, civil servants, and workers in large colonial-owned companies. The Dutch Zending Movement, Christian hospitals with missionary objectives, later established hospitals to serve the poor from the late 1800s. Following Dutch Zending Movement, various Catholic Orders in the early 1900s also built several hospitals, which then followed by Muhammadiyah, an Islamic-based community organization, in 1923, and Jang Seng, the Indonesian Chinese medical group, in 1925. In that era, the colonial government subsidized many private hospitals that prioritized care for poor patients (Trisnantoro, 2004).

In the Old Order Era or post-independence in 1945, development of Indonesian health sector began to shift from fully private-based to public-based. One approach at the time was to nationalize several private hospitals (Trisnantoro, 2004). However, the policy resulted in many

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<sup>4</sup> Puskesmas is abbreviation of Pusat Kesehatan Masyarakat (Community Health Center)

public hospitals and health services suffering from severe resources shortages. The system then reformed within the New Order era which began in 1965.

The New Order government began to emphasize health sector development through market-oriented economic growth (Trisnantoro, 2004). However, the strategy was criticized since it caused the increase of social and economic inequalities. The state was too focused on improving the social welfare of civil servants, the military and the workers in the formal sector, who were considered to be critical to the development of the economy. Indonesian Government then answered the critics by establishing primary community health centers called Pusat Kesehatan Masyarakat (Puskesmas) in 1968 in every sub-district or area with a population of 30,000-50,000. The Government of Indonesia (GOI) also established auxiliary health centers called Puskesmas Pembantu (Pustu) in 1979 as additional health facilities at the village level (Trisnantoro, 2004).

Curative care for the rest of the population was primarily carried out by market mechanisms with minimal government funding support from the 1960s to the 1990s (Trisnantoro, 2004). Within the period, the GOI allowed the establishment of profit-oriented hospitals in 1986 due to demands of Indonesian big cities' residents. In 1997, the Asian financial crisis halted Indonesian economic growth, which caused massive economic dislocation, unemployment, and poverty, and, eventually, triggered a political and governmental transformation from the New Order era to a more open, democratic and decentralized system called the Reformation era.

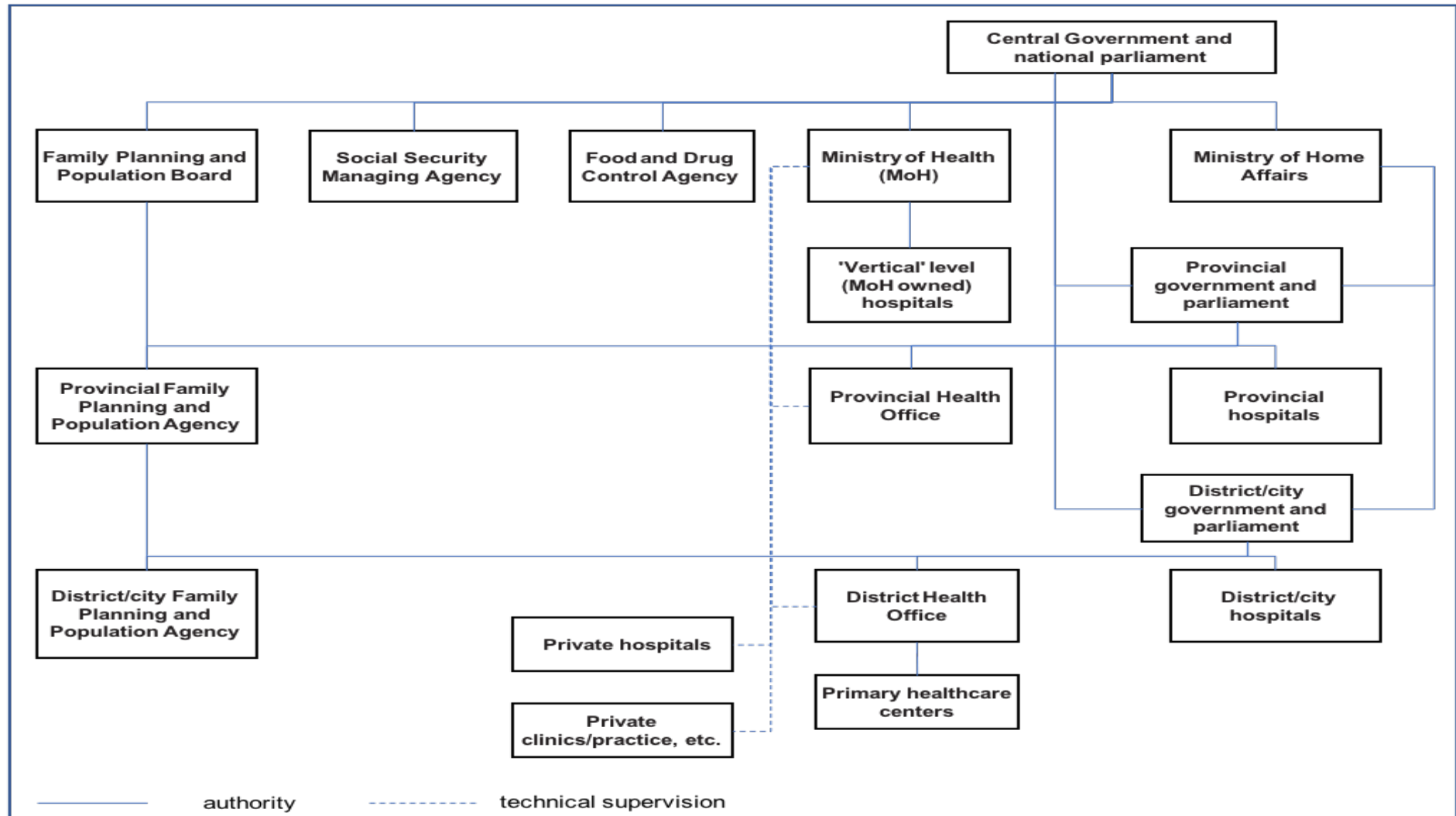
Under health decentralization policy in the Reformation Era in 1999, health services used to be centralized began to be fully decentralized to provincial and district governments by GOI. The new decentralization policy transferred planning responsibilities to local governments under the Ministry of Home Affairs (MHA) coordination and supervision. The Ministry of Health (MoH) maintains and continues to operate several tertiary and specialized hospitals while ensuring the availability of resources and also coordinating the national social insurance supervision. In other words, the MoH changed its function as a regulator. Several ministries and other central government institutions are also involved in the development of the health sector; for example, the Social Security Management Agency (BPJS), and the National Population and Family Planning Board (BKKBN) (Figure 4.1).

Figure 4.1 shows that health services at the local government level are divided into the provincial and district/municipal levels. The provincial government manages provincial hospitals and health services through the provincial health office (PHO). PHOs coordinate health problems at the province/regional level and across districts/municipalities.

Districts/municipalities have district/municipal hospitals and regulate health services through the district/municipal health duty (D/MHO). The D/MHOs also operate health services provided through primary health centers (Puskesmas) and their networks. However, the relationship among MOH, PHOs, and D/MHOs are not in a hierarchical relationship. Districts/municipalities are not sub-ordinates of their provincial government. Each level has its own responsibilities. This decentralized health system places hospitals not as subordinates of the health duty, and D/MHOs are not responsible for their PHO. Likewise, the PHOs are not responsible to the MoH but to the provincial governor. However, the MoH has several "vertical" programs at the Provincial and District/municipal level, e.g., immunization program.

In addition, several non-ministerial/departmental bodies are also related to the health system at the national level. They are (1) National Population and Family Planning Board (BKKBN), (2) Social Security Management Agency called Badan Penyelenggara Jaminan Sosial (BPJS), an independent body that manages the national health insurance program (JKN) by managing membership, collecting premiums, and managing contracts with health service providers, and (3) the Drug and Food Control Agency (BPOM). The BPJS board members are appointed by the president and, therefore, is responsible for the president (GOI, 2018). The BPJS is supervised by the National Social Security Council (DJSN) whose members are also appointed by the president. The DJSN board members consist of a mixture of government officials and community members, as well as representatives from employee associations and employers' associations. Meanwhile, the BPOM was established due to the increasing needs for food and medicine supervision. The body is a non-ministerial organization and under the president and has a coordinating role to the MoH (GOI, 2017).

Figure 4.1 Organization of health system in Indonesia



Source: adopted from Mahendradhata, Yodi, et al. 2017

As the economy continues to grow, demand for health services also increases and Indonesian Government has opened up the health sector for investment which results in more and more private, or profit-oriented, healthcare organizations. The profit-oriented healthcare institutions consist of hospitals and clinics managed by doctors, privately professional practitioners, midwifery clinics, clinical laboratories, and pharmacies. The government regulates them through accreditation, license and registration.

#### **4.3. Indonesian hospitals: present situations**

Decentralization has been a global prominent reform policy since the 1980s. It has usually been politically driven, and promoted by organizations such as the World Bank, in particular. The decentralization of government services began in South-east Asia's largest countries from around 1990. The main arguments promoting decentralization are a) increasing local ownership and accountability, b) improving community participation and focusing on local needs, c) improving integration at local levels, d) increasing streamlining of services and e) allowing innovation and experimentation to suit local needs.

The decentralization policy in the Reformation Era in 1999, health services used to be centralized began to be decentralized to provincial and district governments under the MHA. The decentralization policy transferred planning responsibilities and managed the provision of services from the MoH to local governments.

Since the 1980s, decentralization has been one of the leading reform policies in managing governance. Initially, this policy was generally politically driven and then promoted by organizations such as the World Bank, in particular. Decentralization of governmental services in Asia was started by Southeast Asian countries in the 1990s. The main reasons behind the promotion of the policy were a) increasing ownership and accountability at the local level, b) increasing community participation and focusing on local needs, c) increasing integration at the local level, d) streamlining services, and e) encouraging innovations and experiments to meet local needs.

In Indonesia, the decentralization policy strengthened in the Reformation Era, which began in 1999. Though health services were highly centralized previously, they began to be more decentralized to provincial and district governments under the coordination of the MHA. Through the decentralization policy, the central government bestowed most of its authority in managing hospitals, including financial management, to local governments.

According to Indonesian Law No. 44/2009, hospitals in Indonesia can be classified as the following (GOI, 2009):

- 1) type of ownership, i.e. public and private;
- 2) financial objectives, i.e. not-for-profit orientation and profit-oriented;
- 3) group of providers, i.e. Central Government, Local Governments, NGOs, and Privates;
- 4) operators (institution that run the business), e.g. MoH, National army, National police, Other ministries, Provinces, Districts, Cities, NGOs, State enterprises, and Other privates;
- 5) functions related to educational responsibilities, i.e. teaching and non-teaching hospitals;
- 6) degree of hospital capacity to provide range of clinical services, e.g. categorization of secondary and tertiary hospitals, and classification of general hospitals into A, B, C, and or D class.

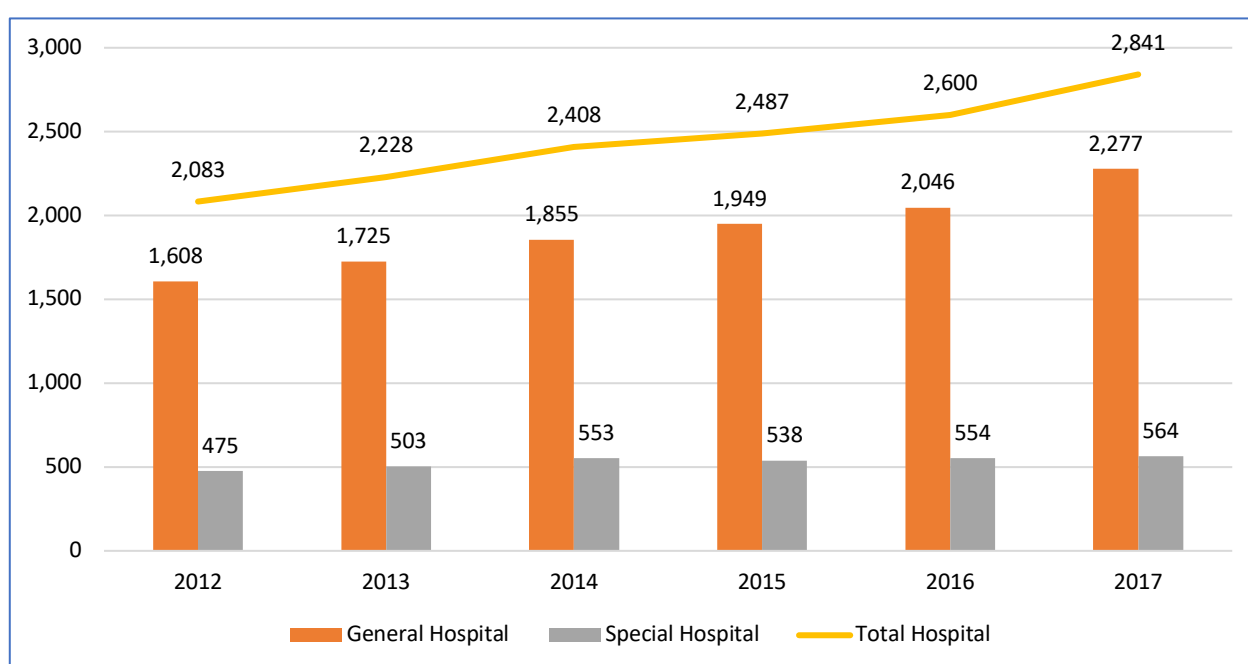
In 2017, there were 1,550 public hospitals all over Indonesia, mostly located at the district level (Table 4.1). The central government (MoH) runs the hospital called vertical-hospitals (33 hospitals), whilst other hospitals are owned by provincial (141 hospitals), district (534), and municipality governments (92). Other public hospitals are operated by National army (119), National police (47), NGOs (565), and Other ministries (19). Private hospitals were 1,291 in total, or 45.44%, in 1997. They are owned and operated by state enterprises (50 hospitals) and other privates (non-state state enterprises) (1,241 hospitals).

Table 4.1 Indonesian Hospitals, 2017<sup>5</sup>

Classification		Number	Percentage
By ownership	Public	1,550	54.56%
	Private	1,291	45.44%
	Total	2,841	100.00%
By provider	Central Government	218	7.67%
	Local Governments	767	27.00%
	NGOs	565	19.89%
	Privates	1,291	45.44%
	Total	2,841	100.00%
By operator	Ministry of Health	33	1.16%
	National army	119	4.19%
	National police	47	1.65%
	Other ministries	19	0.67%
	Provincial	141	4.96%
	District	534	18.80%
	City	92	3.24%
	NGOs	565	19.89%
	State enterprises	50	1.76%
	Other privates	1,241	43.68%
	Total	2,841	100.00%

<sup>5</sup> Data source: <http://sirs.yankes.kemkes.go.id>

Figure 4.2 Number of Indonesian hospitals 2012 – 2017<sup>6</sup>



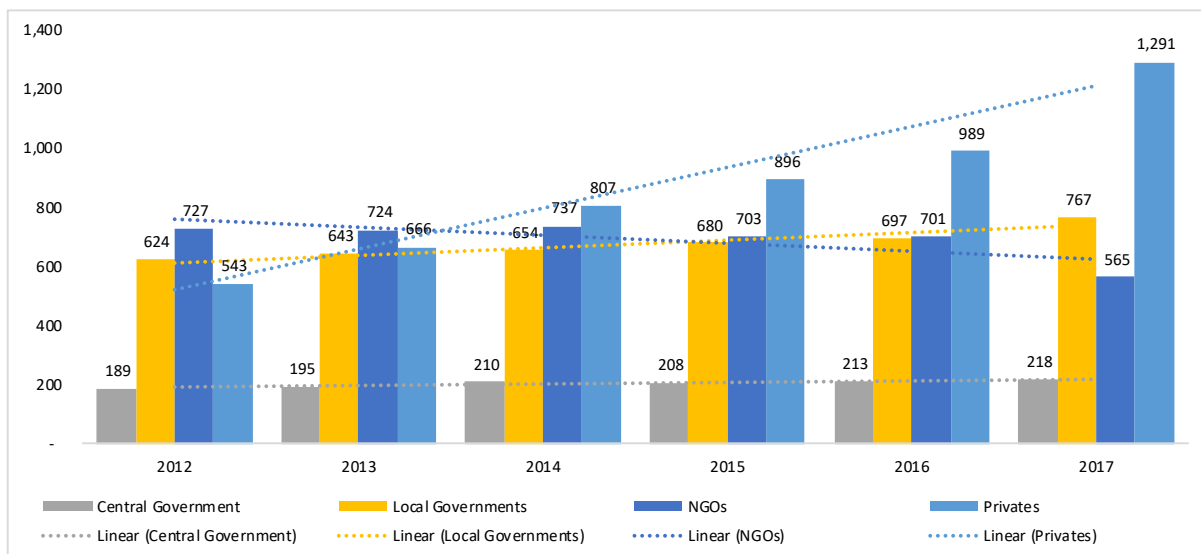
Source: extracted from <http://sirs.yankes.kemkes.go.id>

The number of hospitals continues to increase as a result of the decentralization policy. As shown in Figure 4.2, the number of hospitals in Indonesia reached a total of 2,841 in 2017 or increased by 128% compared to 2004 (1,595 hospitals). Meanwhile, it seems that Indonesian Government policy during the decentralization period was prioritizing the developing the general hospital type compared to the specialized hospital. In 2017, the total of the general hospitals was 2,277, increased 133.30% from 2004 (976 hospitals). The special hospitals increased 108.89% from 270 hospitals in 2004 to 564 in 2017.

Private hospitals which are mostly profit-oriented grew significantly between 2012 and 2017. There were 727 private hospitals in 2012 and continued to increase with 1291 hospitals (137.75%) in 2017 (Figure 4.3). Most of the private hospitals operate in Indonesia's main cities, e.g., Siloam Gleneagles (Lippo group), Medistra (Astra Group), Metropolitan Medical Centre (MMC), Graha Medika, Honoris, Ongkomulyo Medical Centre (OMC), and Mitra Keluarga. Private hospitals that mostly are supported by professional medical staffs and equipped with various facilities and sophisticated technology, especially diagnostic technology, charged high-fees for their services. However, the high-fees do not appear to discourage patients of middle-income communities from utilizing the services, and also indicates that there are promising investment opportunities within the Indonesian healthcare business.

<sup>6</sup> Data source: <http://sirs.yankes.kemkes.go.id>

Figure 4.3 Growth of Indonesian hospitals based on their providers<sup>7</sup>



Source: extracted from <http://sirs.yankes.kemkes.go.id>

Following decentralization, the number of hospitals operated by local governments increased slightly from 624 in 2012 to 767 in 2017. The growth was due to the establishment of new local governments during the Reformation Era. Total hospitals operated by the central government also increased from 189 in 2012 to 218 in 2017. Some of NGOs' hospitals transformed their business form from non-profit to profit-oriented (private), and consequently, decreased the number of total hospitals from this group from 727 in 2012 to 565 in 2017.

According to MoH Regulation Number 340 Year 2010 concerning Classification of Indonesian hospitals, Indonesian hospitals are classified into A, B, C, D, and non-classified hospitals depending on the range of services provided, Human Resources (HR), equipment (technologies), facilities and infrastructure, and administration and management of the hospitals (MoH, 2010). The regulation classified hospitals as follows:

- a) Type A hospitals: Top referral hospitals providing a wide range of subspecialties services, as well as academic hospitals owned by the MoH.
- b) Type B hospitals: Hospitals providing a wide range of specialist services and limited subspecialist services, established in each provincial capital as the referral point for district hospitals. Type B also includes academic hospitals that are not classified as Type A and receive case referrals from district hospitals.
- c) Type C hospitals: Hospitals providing limited specialist services, which should at the minimum include internal medicine, surgery, pediatric medicine, and obstetric services. Type C hospitals receive case referrals from the Puskesmas.

<sup>7</sup> Data source: <http://sirs.yankes.kemkes.go.id>



- d) Type D hospitals: Hospitals that are in transition/development to becoming Type C hospitals, which currently only provide general medicine and dental health-care services. Type D hospitals also receive case referrals from the Puskesmas.

Table 4.2 Indonesian Hospitals based on their class, 2017<sup>8</sup>

Classification								
Type	Owner	Operator	A	B	C	D	non-classified	Total
Public	Central Government	MoH	29	3	1	0	0	33 (1.16%)
		National army	4	17	44	37	17	119 (4.19%)
		National police	1	4	26	14	2	47 (1.65%)
		Other ministries	0	7	9	2	1	19 (0.67%)
	Local Governments	Provincial	24	60	27	29	1	141 (4.96%)
		District	1	87	281	118	47	534 (18.80%)
		City	0	42	37	13	0	92 (3.24%)
	NGOs		0	62	279	184	40	565 (19.89%)
Private	State enterprises	3	4	27	10	6	50 (1.76%)	
	Other privates	5	122	703	356	55	1,241 (43.68%)	
Total			67 (2.36%)	408 (14.36%)	1,434 (50.48%)	763 (26.86%)	169 (5.95%)	2,841 (100.00%)

Source: extracted from <http://sirs.yankes.kemkes.go.id>

As shown in Table 4.2, Indonesian hospitals were mostly classified into C class in 2017 (50.48%, or 1,434 of 2,841 hospitals) and only 2.36% (67) of them were A class. The class B hospitals were 408 (14.36%), while the D class hospitals were 763 (26.86%) and 169 hospitals (5.95%) were not classified. Given the classification results in Table 4.2, Indonesian hospitals are mostly still suffering from limited physical resources and human resources since only 16.72% (A and B classes) that able to provide a wide range of clinical services.

#### 4.4. Reform of Indonesian public hospital management

Reform of Indonesian hospitals began by initiating a program called Unit Swadana (self-financing autonomy) in 1991. This program that provides hospitals more spaces to diversify their income sources in order to improve their cost recovery performance (Trisnantoro, 2004). The swadana and non-swadana hospitals were different according to the utilization of their income. The non-swadana hospitals were obligated to report and immediately deposit their

<sup>8</sup> Data source: <http://sirs.yankes.kemkes.go.id>

revenues generated from patient services to the state treasurers, which were then administratively consolidated and reported to the community through the parliament members, while swadana hospitals can quickly utilize their revenues. The implementation of Swadana program was run strictly under supervision and control of MoH, and also local authorities at the provincial and district levels the coordination of MHA. However, though the self-financing mechanism has been adopted by the hospitals, the central and local governments still retained great control over hospitals' planning and budgeting. The government then extended the Swadana policy in 2000 by transforming MoH-owned hospitals into Government-owned corporate-style institutions called Perusahaan Jawatan (PERJAN), which applied business-like accounting systems. Devolution policy, i.e., a policy that gave hospitals at provincial and district levels more authority to manage personnel, finance, and procurement to reduce financial dependency (subsidy) from the central government, also began to be implemented in 2001.

In 2003, the public service management reform in Indonesia was introduced and encouraged to nationally implement under Indonesian Law Number 17/2003 concerning State Budget (GOI, 2003a). The Law 17/2003 then was followed by a series of laws and regulations had been issued regarding the reform of Indonesian government institutions, including government-owned hospitals. Some of those influential laws and regulations were Law number 1/2004 concerning State Treasury, Law number 15/2004 concerning State Financial Audit, Management and Accountability, Government Regulation number 23/2005 concerning Badan Layanan Umum (Public Service Agencies), Government Regulation Number 24/2005 concerning on the Government Accounting Standard, and Government Regulation Number 58/2005 concerning Financial Management of Local governments (GOI, 2004, 2005a, 2005b, 2005c, 2005d, 2005e). Those laws and regulations obligated PERJAN hospitals to transform into a new agency form called Badan Layanan Umum (Public Service Agency). Moreover, public hospitals that were operated by local governments had to follow The MHA Regulation Number 61/2007 which also regulated local government hospitals to transform their hospitals into BLUD<sup>9</sup>. Theoretically, by implementing all of those laws and regulation, hospitals could provide better service outputs and well-managed financial condition.

Local government hospitals, before the implementation of BLU/BLUD, were required to develop annual plans based on the local Health Office's Plan and submit their daily operating

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<sup>9</sup> BLUD refers to Badan Layanan Umum Daerah. Word of "Daerah" means local. Hence, BLU refers to government units within central governments and BLUD for local governments (provincial, municipalities and districts)

revenues to their local government accounts. They could use the budget only after approval by parliament but they could not receive this budget until the second quarter of the year. The procedure caused local government hospitals were slowly in responding to the patients' needs. A hospital, for instance, only can replace its broken X-Ray lamp after its parliament approves the proposed budget in the quarter of the year budget. Although it is essential for hospital daily operation, government-owned hospitals are not allowed to use their operating revenues without approval.

The BLU/BLUD umbrella opens up a new way of implementing the performance-based system within government institutions. According to article no. 68 and 69 of Law Number 1/2004, government institutions with the primary role and function of serving the public can implement a flexible finance management that emphasizes productivity, efficiency, and effectiveness by transforming the institutions into BLU (GOI, 2004). The law defines BLU as the government institutions that serve the public needs by providing goods and/or services under non-profit orientation, efficiency and productivity. Under the law, the BLU institutions (BLUs) are expected to reform their financial management in order to improve public service. The BLUs are similar to independent agencies in the UK in the way that their executive board is separated from the central government. The independent agencies, as well as the BLUs, were given full flexibility in managing their own activities to achieve maximum efficiency and quality of public service. The BLU/BLUD, according to Preker & Harding (2003, p. 10), is an effort of Indonesian government to improve the public hospitals' performance through corporatization.

Corporatized hospitals, or BLU hospitals, have broader decision space on finance and other resources than Swadana hospitals. They are also different from sub-ordinates of local government entities, namely local government offices known as 'Satuan Kerja Perangkat Daerah/SKPD', which are operated under Government Law No. 58/2005 concerning Management of Local Government Finance Governance (GOI, 2005c). The BLUs have greater control on budgeting, revenue utilization, investment, partnership with private sector services and investors, procuring debt and accounts receivable, and personnel management. Corporatized hospitals were expected to reduce the dependency on central government subsidies, to increase the competitiveness of public hospitals within other public and private hospitals, and to provide better health services for the communities (Maharani & Tampubolon, 2017) (Table 4.3).

Table 4.3 Corporatized vs non-corporatized government-owned hospitals in Indonesia<sup>10</sup>

Distinguishing aspects	Local government entities (non-corporatized)/SKPD	Corporatized hospitals (BLU/BLUD)
a. Management	Must from Civil servants (PNS)	Civil servants and/or Professional (non-civil servants)
b. Tariff/service fee	Equity and propriety based (decided by government)	Cost per unit
c. Midterm Plan document	Midterm Strategic Plan (Rencana strategis)	Business Strategic Plan (Rencana Strategik Bisnis/RSB)
d. Annual Budgeting document	Activity and Budget plan (Rencana Kerja dan Anggaran/RKA)	Business and Budget Plan (Rencana Bisnis Anggaran/RBA)
e. Budget spending	Must be appropriated by local government (Dokumen Pelaksanaan Anggaran)	Partially can be spent Immediately without appropriation (based on threshold provision)
f. Cash/Bank	Not allowed to have own bank account	allowed to have own bank account
g. Revenue	Must be deposit into government's bank account (treasury)	Allowed to be spent immediately without depositing into government's bank account
h. Cash surplus	Must be deposit into government's bank account	Allowed to be spent immediately without depositing into government's bank account
i. Receivable/payable	Not allowed to make Receivable/payable	allowed to make Receivable/payable
j. Financial reporting	Based on government accounting standard (SAP)	Based on generally accounting principles (Financial Reporting Standards/SAK)
k. Financial report audit	Audited by supreme Audit Board of the Republic of Indonesia (BPK-RI)	Audited by independent auditors
l. Long-term investment	Not allowed	Allowed

Maharani & Tampubolon (2017) reported that corporatization, indeed, has improved revenue and expenditure of the Indonesian public hospitals but has not improved efficiency and equity. They highlight that corporatized hospitals were poor in design since Indonesia began the policy without a pilot model - a strategy that worked in Malaysia (Hussein et al., 2003), Vietnam (London, 2013), Pakistan (Bossert & Mitchell, 2011), and Singapore (Phua, 2003) - that led to a lack of preliminary data needed to refine the reform design. They also suggested to improve the capacity of hospital managers, and maintain regular monitoring (Maharani & Tampubolon, 2017). In a case study of five district public hospitals in Java island of Indonesia, Andayani et al. (2015) found that a new business standards of financial reporting has led hospitals to expand flexibility in the use of public resources and also to the expansion of hospitals responsibility. However, successful implementation depends on the operational

<sup>10</sup> Extracted from Law Number 17/2003, Law number 1/2004, Law number 15/2004, Government Regulation number 23/2005, Government Regulation Number 24/2005, The MHA Regulation Number 61/2007 (GOI, 2003a, 2004, 2005a, 2005d).

management system of the hospital to support the accountability. They recommended that the hospital managers were encouraged to improve their political communication skills for the effectiveness of hospital advocacy process to the politicians, and should monitor performance from various perspectives, including clinical, managerial and financial. All of these findings, i.e. lack of preliminary data for good design reforms, lack of capacity and capability of hospital managers, and the need for regular monitoring system from various perspectives, would be plausible reasons behind the adoption of BSC by Indonesian public hospitals.

#### **4.5. Hospitals' Performance measurement within Indonesian public hospitals**

Indonesian public hospitals started to adopt BSC as their performance measurement tool in 2001. Within the year, MOH published guidelines on the measurement of patient services called clinical quality indicators and key performance indicators which aimed to measure hospital performances at the organizational level. The guidelines were developed based on BSC framework (MoH, 2005).

In 2013, The Directorate General of State Treasury who acts as Indonesian state's treasurer under of Indonesian Ministry of Finance stipulated a set of performance indicators for Indonesian public healthcare institutions through Regulation Number 54/PB/2013 concerning guidelines of performance assessment for Indonesian public service agencies within healthcare public services. The regulation improved the previous regulations published by MoH and became the latest guideline for assessing Indonesian public hospitals' performance.

The above treasurer regulation mentioned that Indonesian public hospitals are assessed based on (1) financial aspects with a total weight of 30%, and (2) service aspects with a total weight of 70%. First, the financial aspects consist of the financial ratios and compliances on BLU financial governance. The financial ratios used in assessment consist of cash ratio, current ratio, collecting period, fixed asset turnover, return on fixed asset, return on equity, inventory turnover, non-tax revenues over operating expenses, and subsidy ratio. Compliances on BLU financial governance is assed based on to what extent the hospitals obey to the laws and rules related BLU Scheme. Auditor's opinion is one of performance used among compliance indicators.

Second, assessment of service aspect consists of (1) quality service and (2) quality and benefits provided to the communities. The quality service consists of service indicators aimed to maximize the quality of services provided to patients and other stakeholders. The measures are group into (a) productivity, (b) effectivity, and (c) learning and growth. Whereas, quality

and benefits provided to the communities are assessed from customers' and stakeholder' perspectives by measuring customers' satisfaction and hospital impacts on communities (external stakeholders). Details of performance indicators are highlighted in Table 4.4.

The final results of performance assessment categorize Indonesian public hospitals into Good, Medium, and Bad hospital under the following criteria:

- 1) Good with the following categories:
  - 'AAA' for hospitals with an overall score above 95;
  - 'AA' for hospitals with an overall score between 80 and 95; and
  - 'A' for hospitals with an overall score between 65 and 80.
- 2) Medium the following categories:
  - 'BBB' for hospitals with an overall score between 50 and 65
  - 'BB' for hospitals with an overall score between 40 and 50; and
  - 'B' for hospitals with an overall score between 30 and 50.
- 3) BAD Criteria with categories:
  - 'CC' for hospitals with an overall score between 15 and 30; and
  - 'C' for hospitals with an overall score between 0 and 15.

In practice, all indicators in the treasurer's regulation are not adopted by the hospitals. Hospitals' management translates the indicators into BSC framework based on the capacity of each hospital, i.e. by selecting indicators that are relevant to decision making and reporting. The table 4.5 illustrates variations of perspectives and indicators used by several hospitals in their business plan and budget document. It can be concluded from the table that hospitals do not modify the BSC original perspectives.

Table 4.4 Indonesian public hospitals' list of performance indicators<sup>11</sup>

No.	Aspects / Indicators	Description
A.	Financial Aspects	
1.	Financial ratio (maximum score = 19)	
-	Cash ratio	Ratio of total cash and cash equivalent to total current liabilities (%)
-	Current ratio	Ratio of total current assets to total current liabilities (%)
-	Collection period	Number of days required to collect out- standing debts (in days)
-	Fixed asset turnover	Ratio of operating revenues to total fixed assets (%)
-	Return on fixed asset	Ratio of surplus (deficit) to total fixed assets (%)
-	Return on equity	Ratio of surplus (deficit) to total equity (%)
-	Inventory turnover	Ratio of annual revenue to inventory (%)
-	Non-tax revenue on operating expenses ratio	Ratio of total revenues to total operating expenses
-	Patients' fees subsidy ratio	Ratio of total patient's subsidy charges to total revenues
2.	Compliance on BLU financial rules	
-	Business and budget plan document	Timeliness and completeness of the document
-	Standardized financial reports	Financial report quality based on auditor's opinion
-	Approval of BLU revenues and expenditures	Timeliness and completeness on the approval of revenue and expenditure budget
-	Service fees/tariff	Availability of government decree on service fees/tariff
-	Accounting system	Availability of accounting system
-	Approval of accounts	Adequacy of accounts
-	Operating standard procedures on cash management	Availability of operating standard procedures on cash management
-	Operating standard procedures on receivable management	Availability of operating standard procedures on receivable management
-	Operating standard procedures on payable management	Availability of operating standard procedures on payable management
-	Operating standard procedures on procurement	Availability of operating standard procedures on procurement
-	Operating standard procedures on inventory management	Availability of operating standard procedures on inventory management
B.	Service Aspects	
1.	A. Productivity growth	
-	Average growth of outpatient visits	Average of outpatient visits per day in the current year divided by average of outpatient visits per day in the previous year
-	Average growth of emergency room (ER) visits	Average of ER's patient visits per day in the current year divided by average ER's patient visits per day in the previous year
-	Average growth of inpatient days	Total inpatient days in the current year divided by Total inpatient days in the previous year

<sup>11</sup> adapted from <http://blu.djpbn.kemenu.go.id/index.php?r=publication/regulation/view&id=168>.

No.	Aspects / Indicators	Description
	<ul style="list-style-type: none"> <li>- Average growth of radiology checking</li> <li>- Average growth of laboratory checking</li> <li>- Average growth of surgery</li> <li>- Average growth of medical rehabilitation</li> <li>- Average growth of medical students</li> <li>- Average growth of published research</li> </ul>	<p>Average of radiology checking per day in the current year divided by average of radiology checking per day in the previous year</p> <p>Average of laboratory checking per day in the current year divided by average of laboratory checking per day in the previous year</p> <p>Average of surgery per day in the current year divided by average of surgery per day in the previous year</p> <p>Average of medical rehabilitation per day in the current year divided by average of medical rehabilitation per day in the previous year</p> <p>Number of medical students in the current year divided by number of medical students in the previous year</p> <p>Number of published researches in the current year divided by number of published researches in the previous year</p>
	B. Service effectivity	
	<ul style="list-style-type: none"> <li>- Completed medical record in 24 hours after service</li> <li>- Medical record returns</li> <li>- Cancellation rate of surgery</li> <li>- Radiology failure rate</li> <li>- Conformity of prescriptions to formulary</li> <li>- Repetition rate of laboratory checking</li> <li>- Bed occupancy ratio</li> </ul>	<p>Number of medical records completed in 24 hours after service divided by total medical records in a year</p> <p>Number of medical records returned divided total medical records in a year</p> <p>Number of cancelled elected surgeries divided by total planed for surgery actions in a year</p> <p>Number of failures on radiology checking divided by total radiology checking in a year</p> <p>Number of conformity prescriptions to their formulary divided by total of prescriptions in a year</p> <p>Number of repeated laboratory visits for the same case divided by total laboratory checking (visits) in a year</p> <p>Number of inpatient days divided by multiplication of total beds available and total days in a year</p>
	C. Learning and growth	
	<ul style="list-style-type: none"> <li>- Average hours rate of employees' training</li> <li>- Percentage of medical teaching doctors with training of trainers (TOT) qualification</li> <li>- Reward and punishment program</li> </ul>	<p>Total of training hours provided for an employee in a year divided by employees' total training hours in a year multiplied by 20 hours</p> <p>Ration of medical teaching doctors with training of trainers (TOT) qualification to total medical teaching doctors</p> <p>Availability of hospital's reward and punishment programs</p>
2	Quality and benefits provided to communities	
	A. Quality service	
	<ul style="list-style-type: none"> <li>- Emergency response time rate</li> <li>- Outpatients waiting times</li> <li>- Length of stay</li> <li>- Response rate (promptness) of medicine provision</li> </ul>	<p>Patients' average waiting time to get service (in minutes) at the emergency department (ED)</p> <p>Outpatients' average waiting time to get service (in minutes)</p> <p>Average number of days that patients were inpatients (Ratio of total patient days to total inpatient discharges)</p> <p>Patients' average completion of prescriptions (in minutes)</p>



No.	Aspects / Indicators	Description
	<ul style="list-style-type: none"> <li>- Waiting time to surgery action</li> <li>- Waiting time of laboratory report checking</li> <li>- Waiting time to radiology report checking</li> </ul>	<p>Patients' average completion of prescription drug services (in days)</p> <p>Patients' average time to receive results of laboratory checking (standard <math>\leq 140</math> minutes)</p> <p>Patients' average time to receive report of radiology checking (standard <math>\leq 2</math> hours)</p>
	B. Clinical quality	
	<ul style="list-style-type: none"> <li>- Emergency department mortality rate</li> <li>- Mortality rate/blindness &gt; 48 hours</li> <li>- Postoperative death rate</li> <li>- Nosocomial infection rate</li> <li>- Maternal death rate</li> </ul>	<p>Number of patients' death in ED divided by total number of ED patients</p> <p>Number of patients' death or suffer from blindness after 48 hours of care in a year divided by total inpatients</p> <p>Number of surgery patients' death after 2 hours in a year divided by total surgery patients</p> <p>Number of patients suffer from nosocomial infection divided by total patients</p> <p>Number of maternal deaths related to the process of pregnancy and childbirth in a year, compared to the number of pregnant and childbirth mothers in the same year.</p>
	C. Community care	
	<ul style="list-style-type: none"> <li>- Assistance for primary healthcare centers (Puskesmas) and other healthcare institutions</li> <li>- Health counseling</li> <li>- Third class bed ratio</li> </ul>	<p>Programs that foster Puskesmas, healthcare facilities, and social service facilities, in order to reduce mortality rates for children/infants, improve maternal health, and reduce morbidity within communities.</p> <p>Health counseling services provided for both individuals and community groups that include presentation and counseling on health, order and regulations regarding hospitals.</p> <p>Proportion of third-class beds available to total number of beds available. The third classes are provided for general patients, participants of National Health Insurance (JKN), and poor patients, or those funded by Corporate Social Responsibility (CSR) funds.</p>
	D. Customer satisfaction	
	<ul style="list-style-type: none"> <li>- Handling of complaints</li> <li>- Customer satisfaction</li> </ul>	<p>Number of complaints (written complaints) reported to the hospital's customer service unit and have been followed up by the hospital management in a year/period, compared to all complaints (written complaints) received in the same year/period.</p> <p>Score obtained from customer satisfaction survey that conducted using The Government's Community Satisfaction Index (Indeks Kepuasan Masyarakat, IKM) instrument.</p>
	E. Environmental concerns	
	<ul style="list-style-type: none"> <li>- Environmental hygiene</li> <li>- Environment's PROPER (Program for Pollution Control, Evaluation, and Rating)</li> </ul>	<p>Environmental cleanliness that includes security, comfort, beauty, order, and environmentally friendly.</p> <p>Result of environmental assessment based on PROPER framework developed by Ministry of Environment. Proper (Program for Pollution Control, Evaluation, and Rating) scores hospital are labeled black, blue, green, and yellow for bad, less good, good, and very good, respectively.</p>

Table 4.5 Examples of BSC perspectives and indicators used by Indonesian public hospitals

Perspectives	Indicators	PH-1	PH-2	PH-3	PH-4	PH-5	PH-6	PH-7	PH-8
Financial	Revenue growth								√
	Cost Recovery ratio <sup>12</sup>	√							√
	Solvability ratio <sup>13</sup>								√
	Operating ratio <sup>14</sup>		√	√	√		√		√
	Return on investment <sup>15</sup>								√
	Current Ratio							√	√
	Cash Ratio							√	√
	Quick Ratio							√	√
Costumer	Customer satisfaction <sup>16</sup>	√	√			√		√	√
	Customer Acquisition <sup>17</sup>				√				√
	Increase in in/out/ER patients								√
Internal Business	Bed Occupancy Rate <sup>18</sup>		√	√				√	√
	Average Length of Stay <sup>19</sup>		√	√				√	√
	Net Death Rate <sup>20</sup>		√	√				√	√
	Gross Death Rate		√	√				√	√

$$^{12} \frac{\text{Total revenues}}{\text{Total expenses}} \times 100\%$$

$$^{13} \frac{\text{Total assets}}{\text{Total liabilities}} \times 100\%$$

$$^{14} \frac{\text{Total operating expenses} - (\text{depreciation} + \text{amortization expense})}{\text{Total revenues}} \times 100\%$$

$$^{15} \frac{\text{Total revenues}}{\text{Total active assets}} \times 100\%$$

<sup>16</sup> Measured by IKM instrument

<sup>17</sup> Measured by number of new patients

$$^{18} \frac{\text{Total number of patient days for a given period}}{\text{Available beds} \times \text{the number of days in the period}} \times 100\%$$

$$^{19} \frac{\text{Total length of stay of discharged patients for a given period}}{\text{Total number of discharges and deaths in the same period}}$$

$$^{20} \frac{\text{Deaths minus those w/in 48 hours of admission in a given period}}{\text{Total number of discharges and deaths, minus Deaths w/in 48 hours of admission w/in the same period}} \times 100\%$$

Perspectives	Indicators	PH-1	PH-2	PH-3	PH-4	PH-5	PH-6	PH-7	PH-8
Learning and growth	Turnover interval <sup>21</sup>		√	√					√
	Bed turnover <sup>22</sup>		√	√					√
	Number of Specialized Doctors							√	√
	Number of General Doctors							√	√
	Number of Dentists							√	√
	Number of Specialized Nurses							√	√
	Number of Non-Specialized Nurses							√	√
	New innovation in products (services)			√		√		√	√

Remark:

Code	Institution	Code	Institution
PH-1	RSUD Sardjito (Yogyakarta)	PH-5	RSSN Bukittinggi (West Sumatera)
PH-2	RSUD Buleleng (Bali)	PH-6	RSUP Sanglah (Bali)
PH-3	RSUD Kebumen (Central Java)	PH-7	RSUD NTB (West Nusa Tenggara)
PH-4	RSUD Dr Harjono (East Java)	PH-8	RSUD Mataram (West Nusa Tenggara)

<sup>21</sup>  $\frac{\text{Available beds} \times \text{days in the period} - \text{patient days for the period}}{\text{Number of discharges, including deaths, in the period}}$

<sup>22</sup>  $\frac{\text{Number of discharges (separations) in the period}}{\text{Available beds}}$

#### **4.6. Summary**

Reformation within Indonesian public organizations during reformation era has brought major changes to Indonesian public hospitals. The hospitals have shown growth of revenues and expenditure as reported by Maharani & Tampubolon (2017), primarily as a result of changes in financial management standards - from government to business standards - that gave greater flexibility on the utilization of public resources and also on expanding hospital responsibilities.

Although BSC was not explicitly stated in the regulation, it can be concluded that from the indicators applied, some Indonesian public hospitals adopt BSC's perspectives in measuring their performance. The regulation includes lagging indicators which represented by financial indicators, such as ratios and customers satisfaction indicators, while leading indicators incorporate clinical utilization measures such as effectivity indicators, which represent internal process. There are also learning and growth indicators which measure hospital's commitment on HR development and also innovation by measuring hospitals' research activities. Those indicators are translated into BSC framework by hospitals and used for planning their business.

## **Chapter 5**

### **DIAGNOSIS OF HOSPITAL VALUE FROM CULTURAL PERSPECTIVES AND EXAMINATION OF THE PERFORMANCE MEASUREMENT SYSTEM**

#### **A case study of Mataram City General Hospital, Indonesia**

##### **5.1 Introduction**

Nowadays, continually changing business environments where intangible assets and execution of strategy are critical to success, have demanded every organization to continuously improve and strive for the latest innovation of performance measurement system. Putting analysis only on the basis of financial reports has been viewed to be no longer relevant (Abdel-Kader et al., 2011, p. 214; Niven, 2008, p. 14), therefore, adoption of comprehensive PMSs, such as BSC, within healthcare organizations, was promoted extensively to obtain critical elements of non-financial performance measure regarding innovation, customer satisfaction, and employee involvement. However, PMS adoption in healthcare organizations is acknowledged to be more complicated than that in other industries since its goals is challenging to operationalize because of the complexity of treatments, settings, and patient groups (Adair et al., 2006, p. 59). Furthermore, the combination of professional and administrative management models and the interrelationship among multiple stakeholders create greater complexity in measuring, interpreting, and balancing the medical staff relations and quality of care with other organizations (Adair et al., 2006, p. 59; Zelman et al., 2003, p. 1).

Within high-income countries (HICs), balanced perspectives in BSC have promoted integration and facilitation of clinical, operational, and financial indicators with higher employee motivation and patient satisfaction as outcomes. In non HICs, implementation of BSC is facing political issues, leadership priorities, resource constraints, local culture, levels of education, and quality of information systems were considered as challenges as well as lack of involvement in medical professionals and lack of access to information (Rabbani et al., 2010). Lack of understanding of actors involved (Biro et al., 2003), is also a challenge. Rabbani et al. (2010) and El-Jardali et al. (2011) reported that culture was one of the constraints when BSC is implemented in Pakistan and Lebanon hospitals. Hence, assessing contextual factors such as hospital culture types and values should be a pre-requisite (El-Jardali et al., 2011; Rabbani et al., 2010).

This chapter presents a case study of organizational culture diagnosis and investigation of the relationship of organizational culture to the acceptance, the importance and the use of performance measurement systems in an Indonesian local public hospital, i.e. Mataram City

General Hospital. The hospital is located in West Nusa Tenggara Province and has been implementing BSC as its PMS since its establishment. The chapter proceeds as follows. In Section 5.2, a brief explanation of hospital surveyed is described, including historical performances, followed by explanation of research framework and hypotheses development in section 5.3. In section 5.4, research design and methodology are discussed, followed by description of research respondents and procedures of data analysis in Section 5.5 and Section 5.6, respectively. Structural Equation Model (SEM) as an approach used to investigate the relationship between culture and the acceptance, the perceived importance and the use PMS is discussed in Section 5.7. Descriptive analysis and results are discussed in Section 5.8, followed by discussion on analysis and results of Partial Least Square – Structural Equation Model (PLS-SEM) in Section 5.9. Results of data analysis are summarized in Section 5.10.

## **5.2 Hospital Profile**

The Mataram City General Hospital (MCGH) is a public hospital owned by Mataram City Government. MCGH is currently implementing BLUD scheme and has been adopting BSC framework since its establishment in 2010 (MCGH, 2011, 2016b). Table 5.1 shows characteristics and performance of the hospital under study in last 4 years. Hospital beds grew slightly with 23.4% in the last four years (from 171 in 2015 to 121 in 2018), while the number of employees increased significantly from 632 in 2015 to 1,021 in 2019 (growth = 61.6%). The number of doctors increased by 68.9%, from 171 in 2015 to 103 in 2018. The growth was lower compared to the growth of nurses and other types of medical staffs which grew 89.5% between 2015 and 2018 (Table 5.1 Panel b: human resources).

MCGH revenues per bed increased by 82.50% from Rp 401.70 million to Rp 733.12 million in 2018. However, the increasing revenues in 4 years did not improved financial difficulty of the hospital since the expenses/bed was always higher than revenue/bed (55.7% in the last four year) (Table 5.1 Panel c: revenues and expenses). MCGH revenue to operating expense ratios were around 80s% with a growth of 17.2% in the last four years (lower than revenue/bed growth). Current ratio and debt ratio show a low increase with a growth of 4.6% in the last four years. Growth of total asset turnover and return on equity ratios were negative with -24.4% and -24.1%, respectively, in the last four year. (Table 5.1 Panel d: financial ratios).

Bed occupancy ratio (BOR), i.e. the ratio of patient service days to inpatient bed count days in a period under certain time-range consideration (Indonesian Ministry of Health, 2014), fluctuated within 4 years with an average of 68.25%. Turnover interval ratio (TOI) which represents the average length of days that elapses between the discharge of one inpatient and

the admission of the next inpatient to the same bed (Bergeron, 2018) is always positive with an average of 1.31 days. The positive growth of TOI indicates increase of hospital utilization. The net effect of changes in BOR and Length of Stay (LoS) can be seen from the bed turnover rate. The rate increased from 60.84 in 2015 to 80.29 in 2017 then decreased dramatically to 56.1% in 2018, indicating that there was a declining trend in bed utilization<sup>23</sup>. Net death rate (NDR)<sup>24</sup> shows a declining of 32.4% in the last four year, meaning that the hospital has fulfilled the minimum standard set by the Indonesian Ministry of Health which demands for under 24% (GOI, 2008). However, NDR of 18.56% in 2018 was above 3 to 4 percent of acceptable efficiency standard according to Srinivasan (2008, p. 330). Similarly, following the decrease in NDR, gross death rate that is measured by ratio of total deaths to total discharges including deaths, also declined from 49.11% in 2015 to 40.34% in 2018.

Table 5.1 MCGH characteristic and performance

	2015	2016	2017	2018
Panel a: beds				
Total beds	171	222	246	211
Panel b: human resources				
Number of Doctors	61	74	93	103
- General Doctors	28	29	45	53
- Specialized Doctors	33	45	48	50
Number Nurses and others	181	289	310	343
Total Medical Staffs	242	363	403	446
Total Employees	632	850	947	1,021
Panel c: revenues and expenses				
Revenue/bed (in million rupiah)	401.70	479.72	548.86	733.12
Operating Expense/bed (in million rupiah)	558.53	584.25	640.20	869.60
Profit (loss)/bed (in million rupiah)	(156.83)	(104.53)	(91.34)	(136.47)
Panel d: financial ratios				
Revenue/operating expense (%)	71.92	82.11	85.73	84.31
Current ratio (%)	9.06	10.57	14.33	9.48
Debt ratio (%)	9.06	10.57	14.33	9.48
Total asset turnover (%)	59.20	56.06	51.70	44.73
Return on Equity (%)	65.10	62.68	60.34	49.42

<sup>23</sup> According to MCGH management, the decrease due to the implementation of the latest patient referral system by BPJS (Badan Pengelola Jaminan Kesehatan) in 2018. BPJS is a government body that administers Indonesian national health insurance).

<sup>24</sup> Also known as the institutional death rate, i.e. the death rate that “does not include deaths that occur within 48 hours of admission” (Goel, 2014, p. 357)

	2015	2016	2017	2018
Panel e: service ratios				
Bed occupancy ratio (%)	65.00	63.00	75.00	70.00
Bed turnover interval (days)	1.86	1.36	0.97	1.05
Bed turnover rate (%)	60.84	64.1	80.29	56.1
Length of stay (days)	2.8	4.73	2.61	2.67
Net death rate (%)	27.46	24.71	23.4	18.56
Gross date rate (%)	49.11	40.65	41.48	40.34

Source: MCGH (2015, 2016a, 2016b, 2017, 2018)

In summary, the MCGH performance has improved in average within a four-years period, particularly its revenue. However, the increasing performance in revenue generating were not followed by improvement in efficiency and equity, supporting findings by Maharani & Tampubolon (2016, 2017).

### 5.3 Research framework and hypotheses development

Henri (2006) reported that in manufacturing firms, there are relationships between organizational culture, and the diversity and the nature of measures used in manufacturing firms. Specifically, he found that the firms were dominated by flexible culture types. His finding is supported by Eker & Eker (2009) which studied the relationship between organizational culture and PMS in Turkish manufacture firms.

Within public sector organization, different results were reported by researchers regarding the relationship between clan culture in hospital performance. In accordance with the adoption of PMS, Aboajela (2015) found that clan culture has a significant negative direct relationship with the acceptance and use of performance measurement systems in Libyan higher institutions. Shortell et al. (2001) found that there was no significant relationship between clan culture and evidence-based care standards in US healthcare. While Acar & Acar (2014) reported that, within Turkish public healthcare it was difficult to improve financial performance under a clan-based culture. Significant relationship was reported by Escuriet et al. (2015) who studied Netherland healthcare organizations. They found that a healthcare unit with clan culture have better perceived and observed quality of care from the viewpoint of patients. Similarly, study by Hajnal (2004) also found that clan culture has a statistically significant relationship with perceived quality of management within the ministries of Hungary government.

In the context of Indonesia, there were no studies have been conducted regarding the relationship between culture and the acceptance, the perceived importance, and the use of PMS



in public organizations. However, in commercial organization context, Mardiana et al. (2018) reported that clan culture dominantly influences the innovation and adoption of technology within an Indonesian IT-based company. As such, the hypotheses related to clan culture and its relationship with the acceptance, the perceived importance, and the use of PMS are derived as follows:

H1 : clan culture is positively related to the acceptance of PMS.

H2 : clan culture is positively related to the use of PMS.

H3 : clan culture is positively related to the perceived importance of PMS.

Cameron & Quinn (2011) explained that the adhocracy culture profile matches that of organizations that focus on external issues and value flexibility and carefulness. Organizations with adhocracy cultures value creativity, risk-taking and adaptability rather than looking for stability and control (Ferreira, 2014), and prioritize service innovation, which can lead to improvements in performance (Hartnell et al., 2011). Adhocracy culture can be relevant to public sector organizations, especially in relation to innovation and performance. Currently, public sector organizations are demanded to be more outward looking, open and flexible due to complex external environments caused by technological breakthroughs, governmental reforms, and governance (Walker & London, 2019).

Most empirical research in the Competing Values Framework (CVF) has found a positive relationship between adhocracy culture and innovation and related performance measures. Naranjo-Valencia et al. (2016) and Jacobs et al. (2013) reported that organizations with an adhocracy culture are likely to achieve significantly higher levels of effectiveness and be more inventive than hierarchy, market, or clan cultures. Ferreira (2014) also suggested that an adhocracy culture has a stronger positive link with new procedures, learning proactively, and taking risks than clan, hierarchy, and market cultures. In hospital-setting, Gerowitz et al. (1996) found that the cultures of senior management teams were positively and significantly related to performance under an adhocracy culture, as well as Adhocracy is positively and significantly related to external stakeholder satisfaction (Gerowitz et al., 1996; Prenestini & Lega, 2013).

The studies examined here indicate that adhocracy culture has a significant relationship with innovation and development. While regarding the PMS acceptance, and its importance and use, Twati & Gammack (2006) study reported that organizations dominated by an adhocracy culture type would exhibit a significant positive direct relationship with the acceptance and use.

Based on the above studies, the hypotheses related to adhocracy culture are derived as follows:

H4 : adhocracy culture is positively related to the acceptance of PMS.

H5 : adhocracy culture is positively related to the use of PMS.

H6 : adhocracy culture is positively related to the perceived importance of PMS.

Organizations dominated by a hierarchy culture are characterized as a formalized and structured place to work, where procedures govern what people do. A hierarchy culture is typical in governmental and well-established organizations with many levels of structure and large numbers of employees (Cameron & Quinn, 2011). Naranjo-Valencia et al. (2016) reported that the hierarchy culture has a positive effect on imitative orientation. Meanwhile, studies conducted by Bossert (1998), Bossert & C Beauvais (2002), Bossert et al. (2003), and Çınar et al. (2013) found that minimum flexibility given in the decision-making process to healthcare organizations by government have contributed to both success and the failure of health reform programs. They suggested that a more decentralized, or more flexible, in business decision making is required to improve the healthcare organizations' performance.

According to the adoption of a new information system and information technology (IS/IT), Twati & Gammack (2006) reported that hierarchy culture type will exhibit a significant negative direct relationship with the acceptance and use of the adopted IT/IS. Twati & Gammack's (2006) findings were similar to Aboajela's (2015) who exhibited that hierarchy culture was negatively and significantly influencing the acceptance and importance of performance measurement systems in Libyan universities. Given the empirical evidences that hierarchy were mostly found negatively related to the performance, the hypotheses related to hierarchy culture are derived as follows:

H7 : hierarchy culture is negatively related to the acceptance of PMS.

H8 : hierarchy culture is negatively related to influences the use of PMS.

H9 : hierarchy culture is negatively related to the perceived importance of PMS.

Market-based culture was adopted by public sector organizations as a new organizational model in order to be less bureaucratic and more efficient. By adopting this culture, the delivery of public services are expected to achieve better performance as well as satisfying citizen's needs. Gerowitz et al. (1996) found that hospitals with a dominant market culture performed above average in areas related to resource acquisition, market share and competitiveness, and also performed significantly better in comparison to clan and hierarchy cultures. Jacobs et al.

(2013) suggest that high performing hospitals with greater financial and managerial autonomy tend to be increasingly associated with market culture. Finally, Twati & Gammack (2006) proved that organizations dominated by a market culture type would exhibit a significant positive direct relationship with acceptance and use of the IT/IS. Hence, the hypotheses related to market culture are derived as follows:

H10 : market culture is positively related to the acceptance of PMS.

H11 : market culture influences the use of PMS.

H12 : market culture is positively related to the perceived importance of PMS.

Performance measurement as a system can be viewed from some theories that have been widely recognized as Technology Acceptance Model (TAM) by Davis (1985, 1989), DeLone-McLean model (1992), Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003), The Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), and The Theory of Planned Behavior (TPB) by Ajzen (1985).

In this research, the theories above are applied to examine the behavioral aspects in PMS adoption, the acceptance, importance, and use of PMS. Perceived acceptance is referred to as “perceived usefulness” proposed in TAM by Davis (1985, p. 82; 1989, p. 320) and UTAUT’s performance expectancy by Venkatesh & Davis (2000, p. 189) and Venkatesh et al. (2003, p. 448), which is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance.” Perceived importance is referred to as an individual’s perception regarding the importance of measures (financial and non-financial) used in adopted PMS. Larcker & Lessig (1980, p. 123) define the perceived importance as “the quality that causes particular information set to acquire relevance to the decision maker.” The perceived importance of PMS would cognitively enhance the use of PMS and also its acceptance as postulated by the acceptance model’s theories such as TPB, TRA, TAM, UTAUT, and DeLone-McLean.

Many studies, e.g., Inamdar et al. (2002); Karra & Papadopoulos (2005); Koumpouros (2013); Baker & Pink (1995); Pink et al. (2003); and Wachtel et al. (1999), have revealed that BSC adoption is helpful for healthcare organizations to be more focused on long-term goals. BSC was also reported useful for balancing the demands of internal and external stakeholders (Radnor & Lovell, 2003), providing a ‘holistic’ and balanced view of the organization’s performance (Tian Gao & Gurd, 2015; Jones et al., 2002; Rabbani et al., 2010), helping in communicating and visualizing the strategy (Grigoroudis et al., 2012; Thalman & Malinowski, 2004), capturing the attention of organizational members, which can be useful in goal-setting

and for motivating employees (Grigoroudis et al., 2012; Thalman & Malinowski, 2004), and mobilizing staff for organizational transformation (Aidemark, 2010; Tsasis & Harber, 2008). Furthermore, the popularity of BSC framework as one of the sophisticated business management strategy also serves in anticipating resistance from organization members, making it easier when monitoring hospital operations to achieve specific changes needed by a hospital (Tian Gao & Gurd, 2015).

Given on the studies above, the following three hypotheses can be suggested:

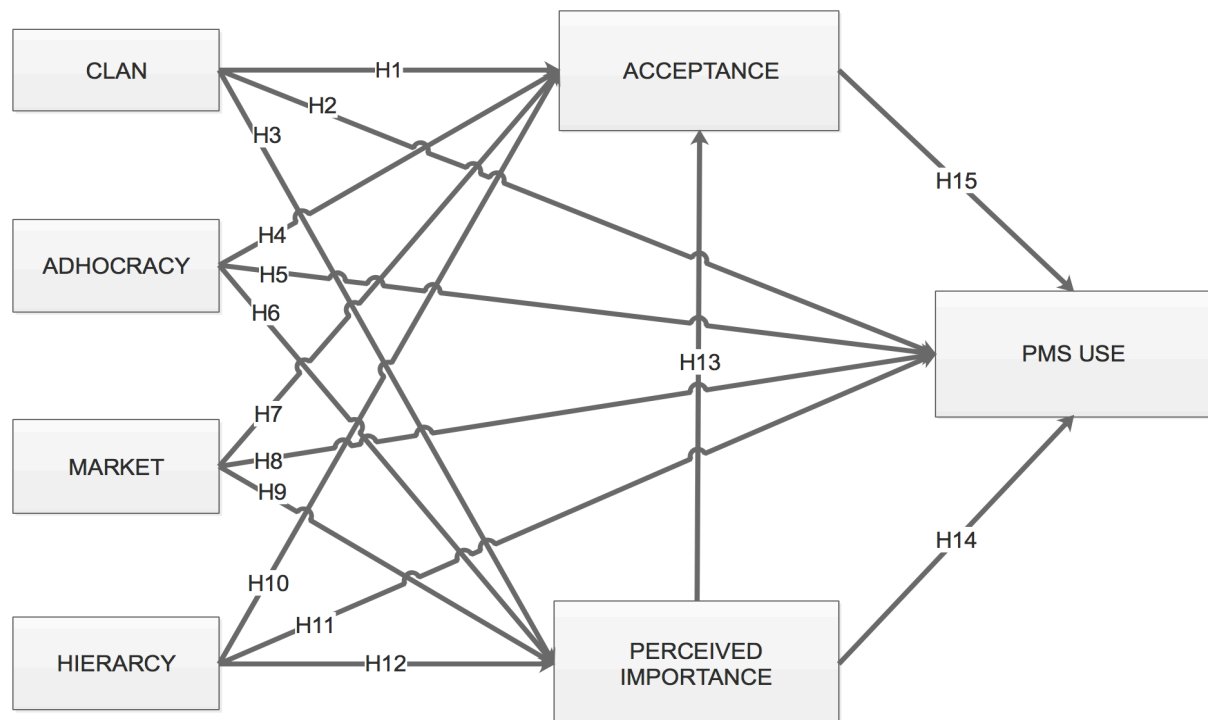
H13 : Perceived importance of PMS positively influences the use of PMS;

H14 : Perceived importance of PMS positively influences the acceptance of PMS;

H15 : The acceptance of PMS has a positive relationship to the use of PMS.

All hypothesis developed in this section are summarized in Figure 5.1 below as an initial research framework of this case study.

Figure 5.1. Initial Research Framework



#### 5.4 Research Design

Research design is a general plan that enables research objectives to be optimally achieved. It is about “what” is a researcher to observe, and “why” and “how” data is collected and analyzed (Babbie, 2015, p. 91). Saunders et al. (2015, p. 166) state that it is obligated for

every decision made in designing a research, to have logical reasons regarding the research questions and objectives.

According to the approach taken related to the links between theory and research, this study employs deductive approach because it contains the development of conceptual frameworks and hypotheses (Stufflebeam & Coryn, 2014). Deductive research has key variables that have been predetermined, so the first task of the researcher is to identify several variables that may be relevant to this research (Babbie, 2015, p. 93). The availability of literatures in the development of hypotheses supports the choice of deductive approach for this study.

This study employs survey method for data collection purposes. The survey approach is appropriate for this study based on the research criteria, the accuracy of the method, the availability of data sources, the availability of research facilities, the time needed for research, and the costs to be incurred (Sekaran & Bougie, 2016). The main objective of this study is to investigate the relationship between culture and the successful adoption and implementation of the BSC within the Indonesian public hospitals. In this case, the survey method is the appropriate method because it deals with attitudes, motivations and preferences (Aaker et al., 2001). The selection of survey methods is also supported by research motivation that aims to find relationships between variables. Other reasons include possibility to provide scientific and accurate results, data sources are easy to access and efficient in terms of time and cost, and the availability of supporting facilities for data collection and analysis such as laptops and software for data processing purposes.

#### **5.4.1 Development of research instrument**

There are several types of survey methods, namely: face-to-face interviews, self-administered questionnaires, mail questionnaires, telephone questionnaires, and questionnaires through electronic media (internet), or a combination of the five types (Aaker et al., 2001; Sekaran & Bougie, 2016). The self-administered questionnaire is the most appropriate technique in this study with reference to the advantages of the method compared to other methods (Babbie, 2015, p. 286), among others:

- The self-administered questionnaire provides a higher response rate compared to the questionnaire by mail, telephone and electronics;
- Various questions can be asked because the respondent can see and read the questionnaire and can ask questions that are not clear to the researcher; and
- This technique is very flexible in getting data.

The development of research questionnaires was carried out through seven stages as suggested by (Aaker et al., 2001), namely: (1) planning what will be measured, (2) formatting the questionnaire, (3) building of items, (4) creating questionnaire lay-out, (5) producing questionnaires, (6) testing the questionnaire, and (7) revising and producing a new revised questionnaire. The first step involves identifying information that needs to be obtained. The process is carried out by considering the hypothetical relationship between the concepts studied. Demographic questions in the survey were also prepared to find out how respondents answered questions according to their demographic profile.

The second stage relates to the substance of the questionnaire developed, in this case, based on the results of the literature review discussed in the previous chapters, followed by determining what will be included in the individual questions (items) that will greatly contribute to the successful of gathering information needed or to serve other specific purposes.

There are four variables to investigate in this study. First, organizational culture, which is referred as “a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 2010, p. 18)” Second, perceived acceptance of PMS, which is referred as “the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1985, p. 82; 1989, p. 320; Venkatesh & Davis, 2000, p. 189; Venkatesh et al., 2003, p. 448).” Third, perceived importance of PMS, which is referred as “an individual’s perception regarding the importance of measures (financial and non-financial) used in adopted PMS (Larcker & Lessig, 1980, p. 123).” Fourth, use of PMS, which is referred as “the information quality that allows a decision maker to utilize the set as an input for problem solution (Larcker & Lessig, 1980, p. 123).”

Measurement of organizational culture variable employs the Organizational Culture Assessment Instrument (OCAI) developed by Cameron & Quinn (2011). Cameron & Quinn (2011, p. 23) reported that OCAI has been used in thousands of organizations around the world for diagnosing organizations’ cultures and predicting performance. Many researchers, e.g. Aboajela (2015); Adams et al. (2017); Bosch et al. (2008); David (2019); Ferreira (2014); Grabowski et al. (2015); Quinn & Quinn (2015); Quinn & Rohrbaugh (1983); Wicks & St Clair (2007); Yu & Wu (2009) have reported the use of CVF for organizational issues such leadership, decision-making, and strategic management. Due to those literatures, the CVF is argued to be a valid framework for examining organizational culture in this study.

OCAI consists of 24 questions, which are classified into six organizational culture dimensions of CVF, i.e. dominant characteristics (DC), organizational leadership (OL), management of employees (ME), organization glue (OG), strategic emphases (SE), and criteria of success (CS), with four items in each dimension (Table 5.2). OCAI result provides four descriptions matched to adhocracy, clan, hierarchy, and market types of organizational culture. In each dimension, respondents were asked to assign 100 points among the four culture types in each of the parts, depending on how well the descriptions matched their view of their own organization. Scores for each of the four culture types were then added across the six parts Cameron & Quinn (2011, pp. 29-30).

Table 5.2 Construct of organizational cultures<sup>25</sup>

Constructs	Items	Culture <sup>26</sup>
Dominant characteristics (DC)	a. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.	CC
	b. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	AC
	c. The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.	MC
	d. The organization is very controlled and structured place. Formal procedures generally govern what people do.	HC
Organizational Leadership (OL)	a. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.	CC
	b. The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.	AC
	c. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	MC
	d. The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	HC
Management of employees (ME)	a. The management style in the organization is characterized by teamwork, Consensus and participation.	CC
	b. The management style in the organization is characterized by individual risk-taking, innovation, freedom and uniqueness.	AC
	c. The management style in the organization is characterized by hard- driving competitiveness, high demands, and achievement.	MC
	d. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.	HC
Organizational glue (OG)	a. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.	CC
	b. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being at the cutting edge.	AC

<sup>25</sup> See appendix 1

<sup>26</sup> CC = Clan culture; AC = Adhocracy culture; MC = Market culture; HC = Hierarchy culture

Constructs	Items	Culture <sup>26</sup>
Strategic emphasis (SE)	c. The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.	MC
	d. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.	HC
	a. The organization emphasizes human development. High trust, openness, and participation persist.	CC
	b. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	AC
	c. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	MC
	d. The organization emphasizes permanence and stability. Efficiency, control and smooth operations are important.	HC
	a. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	CC
	b. The organization defines success on the basis of it is a product leader and innovator.	AC
Criteria for success (CS)	c. The organization defines success on the basis of the winning in the market place and outpacing the competition. Competitive market leadership is key.	MC
	d. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.	HC

Source: Adopted from Cameron & Quinn (2011, pp. 30-31)

Questions on performance measurement systems were borrowed from the research by Aboajela (2015) which developed based on studies by Eker & Eker (2009), Henri (2006), and Hoque et al. (2001) regarding to the diversity of PMS (Table 5.3).

Table 5.3 Constructs of perceived acceptance, and perceived importance and use of PMS<sup>27</sup>

Constructs	Items	Scale
- The acceptance of PMS (ACC)	a. Using financial PMS in my job would enable me to evaluate organizational performance. b. Using non-financial PMS in my job would enable me to evaluate organizational performance. c. Using advanced techniques of PMS in my job would enable me to evaluate organizational performance. d. Using PMS would enhance my effectiveness on the job. e. I would find PMS useful in my job.	Likert scale with, - 1 = strongly disagree - 2 = disagree - 3 = neutral - 4 = agree - 5 = strongly agree

<sup>27</sup> See appendix 1



Constructs	Items	Scale
- The perceived importance of PMS (PI)	a. Financial (e.g. annual earnings, return on assets, cost reduction, general administrative expenditures per patient, tariff per service etc.) b. Customer (patient), (e.g. patient satisfaction, patient retention, etc.) c. Innovation (e.g. new products/services, courses or educational programs etc.) d. Employee (e.g. employee satisfaction, workforce capabilities, etc.) e. Quality (e.g. quality awards, certificates, etc.) f. Community (e.g. public image, community involvement, etc.)	Likert scale with, - 1 = not important at all - 2 = not important - 3 = moderately important - 4 = important - 5 = extremely important
- The use of PMS (USE)	g. Financial (e.g. annual earnings, return on assets, cost reduction, general administrative expenditures per patient, tariff per service etc.) h. Customer (patient), (e.g. patient satisfaction, patient retention, etc.) i. Innovation (e.g. new products/services, courses or educational programs etc.) j. Employee (e.g. employee satisfaction, workforce capabilities, etc.) k. Quality (e.g. quality awards, certificates, etc.) l. Community (e.g. public image, community involvement, etc.)	Likert scale with, - 1 = not used at all - 2 = slightly used - 3 = moderately used - 4 = significantly used - 5 = highly used

Source: adapted from Aboajela (2015)

The OCAI scale is a research instrument originally developed in English. Since none of the respondents understand in English in their daily lives, OCAI scale must be translated first into Indonesian. The same treatment was also applied to the acceptance, importance, and use of PMS scales since they were also originally written in English. This adaptation method is called back translation (Matsumoto & Juang, 2012, p. 49), namely a technique of translating a foreign language instrument into the target language and asking others to translate back into the original language. If contents of the translated version is similar in meanings to its original, then the translated version is considered equivalent (equivalent). If not, the procedure is repeated until the back-translation version is considered the same as the original instrument.

The translation process is conducted with collaboration between researcher and one of researcher's colleagues who works in the university language institution where the researcher teaches as a lecturer. After being translated into Indonesian, we asked for another colleague who had lived in Australia for more than 25 years to translate the Indonesian questionnaire back into English. The process was carried out repeatedly until the two versions are on

meanings. In the adaptation process, OCAI scale is relatively more difficult to translate than PMS scale. The term "organizational glue" requires additional explanation since there is no equivalent term or one single word to express the term in Indonesian. To cope with this problem, we asked some of the respondents to act as coordinators when distributing the questionnaires, and then we conducted a meeting with them to explain more details about the questionnaire items. All communications regarding the progress of questionnaires' collection were conducted through the coordinators.

#### **5.4.2 Pilot Test**

Before employing the questionnaire, a pilot study was conducted to avoid biasing responses of the questionnaire filling (Vaus, 2002, p. 100). Ten questionnaires in paper-based were sent to four middle and lower managers and two academicians who are members of Faculty of Economics and Management from a local public university.

Results and feedbacks from the pilot study were helpful in revising the questionnaire. Some adjustments have been made according the wording of Indonesian and also to meet local context in order to be more understandable.

#### **5.4.3 Validity and Reliability**

Validity is "a measure that accurately reflects the concept it is intended to measure (Babbie, 2013, p. 191)" and reliability is "quality of measurement method suggesting that the same data would have been collected each time in repeated observations of the same phenomenon (Babbie, 2013, p. 188)." While validity is dealing with the question of whether or not a researcher measures the right concept, reliability is concerned with the stability of the measurements and the results of the research, and refers to the consistency of a method in measuring concepts that it is designed to measure.

In this study, the validity of questionnaires used for data collection, were developed based on an extensive literature review and evaluated by a number of people who have adequate knowledge and experience that relevant to the objectives of research, with a pilot study as an additional step. As explained in sub section 5.4.1, the use of OCAI instrument is argued to be a valid framework for examining Organizational cultures since it is one of the most comprehensive instruments in the field of organizational culture. The questions regarding performance measurement systems were also developed based on the previous studies that used different populations at different times. Other methods used to assess the validity and reliability of measurement tool will be explained in section 5.6 as substantial parts of data analysis

procedures including internal consistency reliability, indicator reliability, content validity, construct validity, convergent validity, and discriminant validity (Saunders et al., 2015).

## 5.5 Respondents

The questionnaires were developed on paper-based and distributed to 280 employees of Mataram City general Hospital (MCGH)<sup>28</sup> but a total of 242 questionnaires were returned. However, sixteen of them were dropped from the data because the sum of the questions relating to types of organizational culture (theOCAI questionnaire) did not equal to 100. As a result, a total of 226 questionnaires (80.71%) were included in analysis, which is acceptable in social survey research (Baruch & Holtom, 2008; Nulty, 2008; Richardson, 2005; Sivo et al., 2006). In summary, of 226 respondents, 38% (85) are males and 62% (141) are females. Most of the respondents (122) held diploma<sup>29</sup> (53.98%) with only two held master's degrees (Table 5.4).

Table 5.4 Demographic of Respondents

By group	Male 85 (38%)	Female 141 (62%)	Total 226 (100%)
1. Experience in current position			
< 1 year	84	56	140
1 – 5 years	28	17	45
> 5 years	10	6	16
n.a.	19	6	25
2. Position			
Ward	6	5	11
Head unit	3	7	10
other (functional)	64	38	102
n.a.	68	35	103
3. by education			
Diploma	79	43	122
Bachelor's degree	56	36	92
Master's degree	2	2	4
n.a.	4	4	8

<sup>28</sup> According to Krejcie & Morgan (1970, p. 607), the minimum required sample is calculated as follows:

$$s = X^2 NP(1 - P) \div d^2(N - 1) + X^2 P(1 - P)$$

$$s = 3.841^2 \cdot 1,021 \cdot 0.5 (1 - 0.5) \div 0.05^2(1,021 - 1) + 3.841^2 \cdot 0.5(1 - 0.5)$$

$$s = 279.3001 = 280 \text{ (rounded up)}$$

where,

s = required sample size.

X<sup>2</sup> = the table value of chi-square for 1 degree of freedom at the desired confidence level (0.05 = 3.841).

N = the population size.

P = the population proportion (assumed to be 0.50 since this would provide the maximum sample size)

d = the degree of accuracy expressed as proportion (0.05).

<sup>29</sup> Academic vocational degrees. Equivalent to associate degree in English-speaking countries

By group	Male 85 (38%)	Female 141 (62%)	Total 226 (100%)
4. Type			
Medical staff	32	47	79
Non-Medical Staff	39	88	127
n.a.	14	6	20
Total	85	141	226

## 5.6 Procedures of data analysis

The analytical procedure involves two main steps. Firstly, descriptive analysis of hospital cultures based on the data gathered using OCAI instrument and also descriptive analysis of the acceptance, the perceived importance and the use of PMS. Secondly, statistical analysis by conducting Partial least squared-structural equation model (PLS-SEM) analysis. The PLS-SEM was used to answer research question regarding the relationship between organization culture, the acceptance, and the perceived and the use of hospital's PMS. Further description on the PLS-SEM analysis will be discussed in the next section.

## 5.7 Structural Equation Modelling

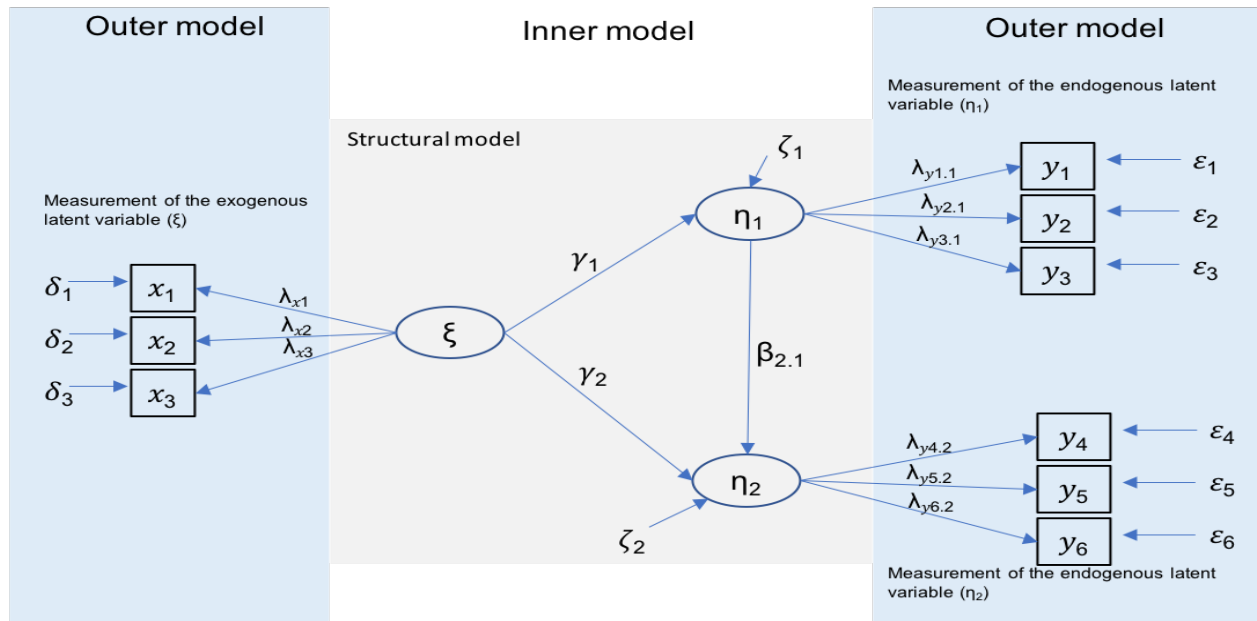
Babbie (2015, p. 165) explains that in social research, there are two approaches that can be used for examining relationships between variables, namely bivariate and multivariate. The bivariate analyzes the association between two variables, while multivariate is used to analyze simultaneous relationships between several variables. This case study uses multivariate approach since it can be applied to complex models with several variables and various types of relationships between them to get a better explanation of a reality (Hair et al., 2017).

There are two generations of multivariate statistical techniques. Within the first generation, cluster analysis, exploratory factor analysis, and multidimensional scaling are widely known for exploratory purposes. While variance analysis, regression, and confirmatory factor analysis (CFA) are used for confirmatory studies (Hair et al., 2017). Hair et al. (2017) also explained that confirmatory research is aimed to test hypotheses, whereas exploratory is concerned mainly in predicting relationships between variables, or improving existing concepts using new approaches.

The second generation is Structural Equation Modeling (SEM) that developed to test and estimate causal relationships between several latent independent and dependent variables (Urbach & Ahlemann, 2010). SEM-based methods can be applied for the purposes of prediction and also to theoretical models where there are latent variables inferred indirectly from some of the items observed (indicators or manifest variables) (Garson, 2016).

SEM can be defined as a combination of two sets of linear equations that support various sub-models, namely measurement models and structural models (Henseler & Fassott, 2010; Urbach & Ahlemann, 2010). The measurement model or outer model determines the relationship between latent variables and observed manifest variables, while the structural model or inner model determines the relationship between latent variables (Figure 5.2).

Figure 5.2 Example of Structural equation model



Source: Adapted from Henseler et al. (2017)

Figure 5.2 exhibits an example of SEM that contains one exogenous variable and two endogenous variables. Some observed manifest variables ( $x_i$  and  $y_i$ ) operationalize each latent variable ( $\xi$  and  $\eta_i$ ). There are path coefficients between exogenous and endogenous latent variables ( $\gamma_1$  and  $\gamma_2$ ), between endogenous latent variables ( $\beta_i$ ), and between latent variables and indicators ( $\lambda_{ij}$ ). Delta ( $\delta$ ) symbol represents error terms of the relationship between exogenous latent variables and their indicators, zeta ( $\zeta$ ) represents error terms of the relationships among endogenous latent variables, and epsilon ( $\epsilon$ ) represents error terms of the relationship between endogenous latent variables and their indicators. Hence, the hybrid structural model in the above figure can be expressed as follows,

- Outer models

$$\begin{array}{lll}
 x_1 = \lambda_{x1}\xi + \delta_1 & \gamma_1 = \lambda_{\gamma 1.1}\eta_1 + \epsilon_1 & y_4 = \lambda_{\gamma 4.2}\eta_2 + \epsilon_4 \\
 x_2 = \lambda_{x2}\xi + \delta_2 & \gamma_2 = \lambda_{\gamma 2.1}\eta_1 + \epsilon_2 & y_5 = \lambda_{\gamma 5.2}\eta_2 + \epsilon_5 \\
 x_3 = \lambda_{x3}\xi + \delta_3 & \gamma_3 = \lambda_{\gamma 3.1}\eta_1 + \epsilon_3 & y_6 = \lambda_{\gamma 6.2}\eta_2 + \epsilon_6
 \end{array} \tag{5.1}$$

- Inner model (structural model)

$$\eta_1 = \gamma_1\xi + \zeta_1$$

$$\eta_2 = \gamma_2\xi + \beta_{2.1}\eta_1 + \zeta_2 \quad (5.2)$$

There are two different statistical approaches in the application of structural equation modeling: covariance-based structural equation model (CB-SEM) and variance based structural equation model (also known as partial least squares-structural equation model, PLS-SEM) (Haenlein & Kaplan, 2004). CB-SEM approaches are useful for examining hypotheses on variable relationships through covariance matrices (Hair et al., 2016) by “using a maximum likelihood function to minimize the difference between the sample covariance and those predicted by the theoretical model (Chin, 1998, p. 297).” In contrast, the PLS-SEM maximizes the variances of the dependent variables explained by the independent variables (Haenlein & Kaplan, 2004, p. 290) instead of reproducing empirical covariance matrix. Although CB-SEM is widely used, there are some advantages of using PLS-SEM. Hair et al. (2017, p. 18) denoted that PLS-SEM approach is suitable within the following situations:

- a. The purpose of the analysis emphasizes prediction rather than obtaining optimal parameter accuracy.
- b. The model is relatively complex with a large number of indicators.
- c. Prediction is more relevant than the estimation of parameters (testing theories).
- d. Samples are relatively small and data are not normally distributed.

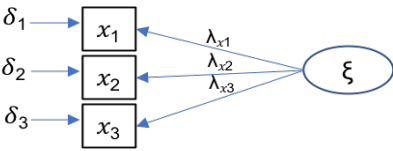
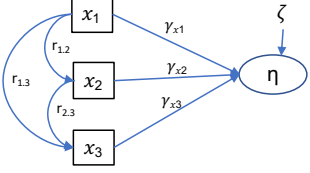
Based on data properties and research models, this study chooses PLS approach for two main reasons. First, the research data were not normally distributed<sup>30</sup>. Second, structural model is relatively complex with the presence of higher order constructs and formative constructs, and mediation effects (Figure 5.3).

A formative construct, or the formative measurement model, views the construct as caused by its items. Each measure represents a specific aspect of the domain construct. Hence, items cannot be exchanged and are not required to have a specific pattern of inter-correlation (Jarvis et al., 2003). In a reflective measurement model or reflective construct, latent variables cause their items. As a result, the size of reflective constructs are expected to highly correlated and interchangeable Jarvis et al. (2003). Table 5.5 highlights guidance on determining whether the measurement model is formative or reflective.

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<sup>30</sup> See Table 5.9, Table 5.12, and Table 5.13

Table 5.5 Comparison of reflective and formative measurement models

Criteria	Reflective Model	Formative Model
Theoretical foundation	Factor Analysis (Spearman, 1904) and Classical Test Theory (Lord & Novick, 1968; Spearman, 1910) with a common assumption that a construct (i.e., the latent variable) determines its indicators.	Alternative approach from the traditional reflective measurement with the assumption that indicators cause the focal construct (i.e., the latent variable) (Bollen, 1964; Bollen and Lennox, 1991)
Mathematical Model	$x_i = \lambda_i \xi + \varepsilon_i$ <p>in which, <math>x_i</math> is the <math>i</math>th indicator of the latent variable <math>\xi</math>, <math>\varepsilon_i</math> is the measurement error for the <math>i</math>th indicator, and <math>\lambda_i</math> is a coefficient (loading) capturing the effect of <math>\xi</math> on <math>x_i</math>.</p>	$\eta = \sum_{i=1}^n \gamma_i x_i + \zeta$ <p>in which, <math>\gamma_i</math> is a coefficient capturing the effect of indicator <math>x_i</math> on the latent variable <math>\eta</math>, and <math>\zeta</math> is a disturbance term.</p>
Causality direction between the constructs and their items, and graphical representation	<p>Direction is from construct to items.</p> 	<p>Direction is from items to construct.</p> 
Source of variance	The latent variable $\xi$ represents the common cause shared by a set of indicators.	The latent variable $\eta$ represents a combined variance supplied by a set of indicators, including the interactions among them.
Measurement errors	Measurement error is assumed for each indicator. The measurement error is fully independent, i.e., $\text{cov}(\varepsilon_i, \xi) = 0$ , and $\text{cov}(\varepsilon_i, \varepsilon_j) = 0$ for $i \neq j$	No measurement errors. In other words, all indicators are assumed to be accurate measures of $\eta$ .
Characteristics of indicators	Indicators are manifestations of the construct.	Indicators are defining characteristics of the construct.
Effects of changes within indicators on the constructs	Changes in the indicator should not cause changes in the construct.	Changes in the indicators should cause changes in the construct.
Effects of changes within constructs on the indicators	Changes in the construct cause changes in the indicators.	Changes in the construct do not cause changes in the indicators.
Interchangeability of the items	Indicators should be interchangeable.	Indicators need not be interchangeable.
Indicators' contents and theme	Indicators should have the same or similar content/indicators should share a common theme.	Contents' Indicators do not need to have similar content, or indicators do not need to share a common theme.
Effects of dropping indicators on the conceptual domain of the construct	Dropping an indicator should not alter the conceptual domain of the construct.	Dropping an indicator may alter the conceptual domain of the construct.
Covariation among the indicators	Indicators are expected to covary with each other.	Not necessary for indicators to covary with each other
Nomological net of the construct indicators	Nomological net of the indicators should not differ.	Nomological net of the indicators may differ.
Antecedents and consequences aspects	Indicators are required to have the same antecedents and consequences.	Indicators are not required to have the same antecedents and consequences.

Source: adapted from Jarvis et al. (2003), Urbach & Ahlemann (2010), and He (2013)

Given the explanation on reflective and formative measurement in Table 5.12 and the initial framework of this study, the measurement of variables is designed in both reflective and formative models. According to its definition and OCAI instrument, culture variables would be designed as reflective because the items in questionnaire are interchangeable and have similar contents. Dropping one or more items of a culture type will not change the construct meaning. While the perceived importance, the acceptance, and the use of PMS would be in formative since their measures (items) represent components of PMS, namely financial and non-financial measures. Dropping one item within a construct will change the construct's meaning because each item is not similar to other items. Park et al. (2017) also suggested that formative model is better than reflective in explaining causalities within BSC perspectives.

The structural model of this research then can be derived as shown in Figure 5.3 and Figure 5.4. Organizational cultures' variables were expressed by  $\xi_1$ ,  $\xi_2$ ,  $\xi_3$  and  $\xi_4$  which represent clan culture (CC), adhocracy culture (AC), hierarchy culture (HC), and market culture (MC), respectively. Variables of perceived acceptance, and perceived importance and use of PMS are labelled by  $\eta_1$ ,  $\eta_2$ , and  $\eta_3$ , respectively. Cultures ( $\xi_1$ ,  $\xi_2$ ,  $\xi_3$  and  $\xi_4$ ) are exogenous, or independent variables, of perceived importance ( $\eta_1$ ), perceived acceptance ( $\eta_2$ ), and use of PMS ( $\eta_3$ ). Perceived importance ( $\eta_1$ ) is an independent variable of perceived acceptance ( $\eta_2$ ), and use of PMS ( $\eta_3$ ), and perceived importance ( $\eta_1$ ) and perceived acceptance ( $\eta_2$ ) are independent variables of PMS use ( $\eta_3$ ).

Given Formula 5.2, Figure 5.3, and Figure 5.4, the structural model for the study is expressed as follows:

$$1) \quad \eta_1 = \gamma_{11}\xi_1 + \gamma_{12}\xi_2 + \gamma_{13}\xi_3 + \gamma_{14}\xi_4 + \zeta_1 \quad (5.3)$$

$$2) \quad \eta_2 = \gamma_{21}\xi_1 + \gamma_{22}\xi_2 + \gamma_{23}\xi_3 + \gamma_{24}\xi_4 + \beta_{2.1}\eta_1 + \zeta_2 \quad (5.4)$$

$$3) \quad \eta_3 = \gamma_{31}\xi_1 + \gamma_{32}\xi_2 + \gamma_{33}\xi_3 + \gamma_{34}\xi_4 + \beta_{3.1}\eta_1 + \beta_{3.2}\eta_2 + \zeta_3 \quad (5.5)$$

where,

$\eta_1$  = perceived importance of PMS construct;

$\eta_2$  = acceptance of PMS construct;

$\eta_3$  = use of PMS construct;

$\xi_1$  = clan culture construct;

$\xi_2$  = adhocracy construct;

$\xi_3$  = hierarchy clan construct;

$\xi_4$  = market clan construct;

$\gamma_{ij}$  = path (regression) coefficient from exogenous  $\xi_{ij}$  ( $j=1,2,3,4$ ) to endogenous  $\eta_{ij}$  ( $j=1,2,3$ );

$\beta_{ij}$  = path (regression) coefficient from exogenous  $\eta_{ij}$  to another endogenous  $\eta_{ij}$ ; and

$\zeta_i$  = the error term associated with an estimated.



Figure 5.3 Structural model based on initial research framework (with PLS-SEM notations)

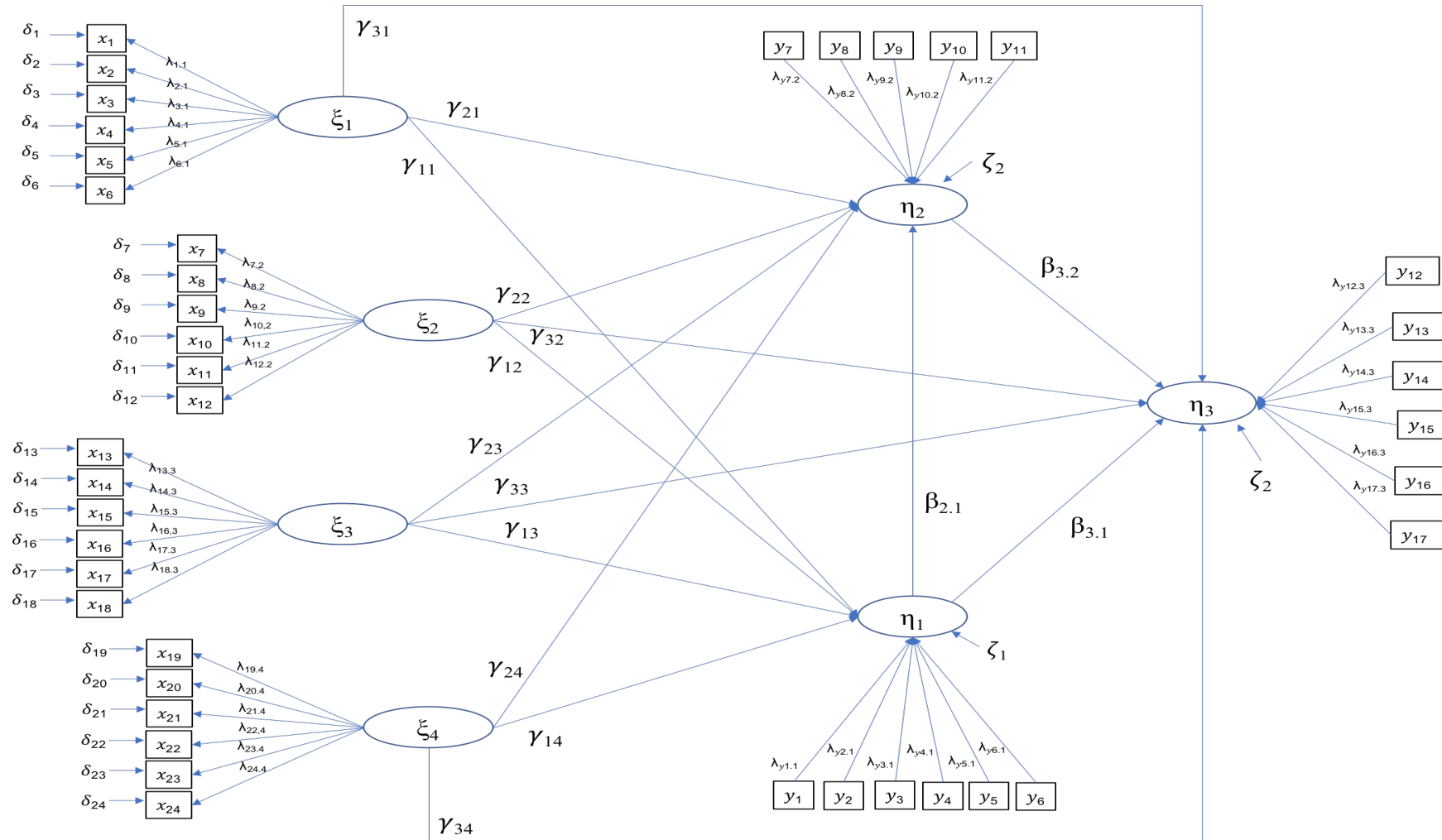
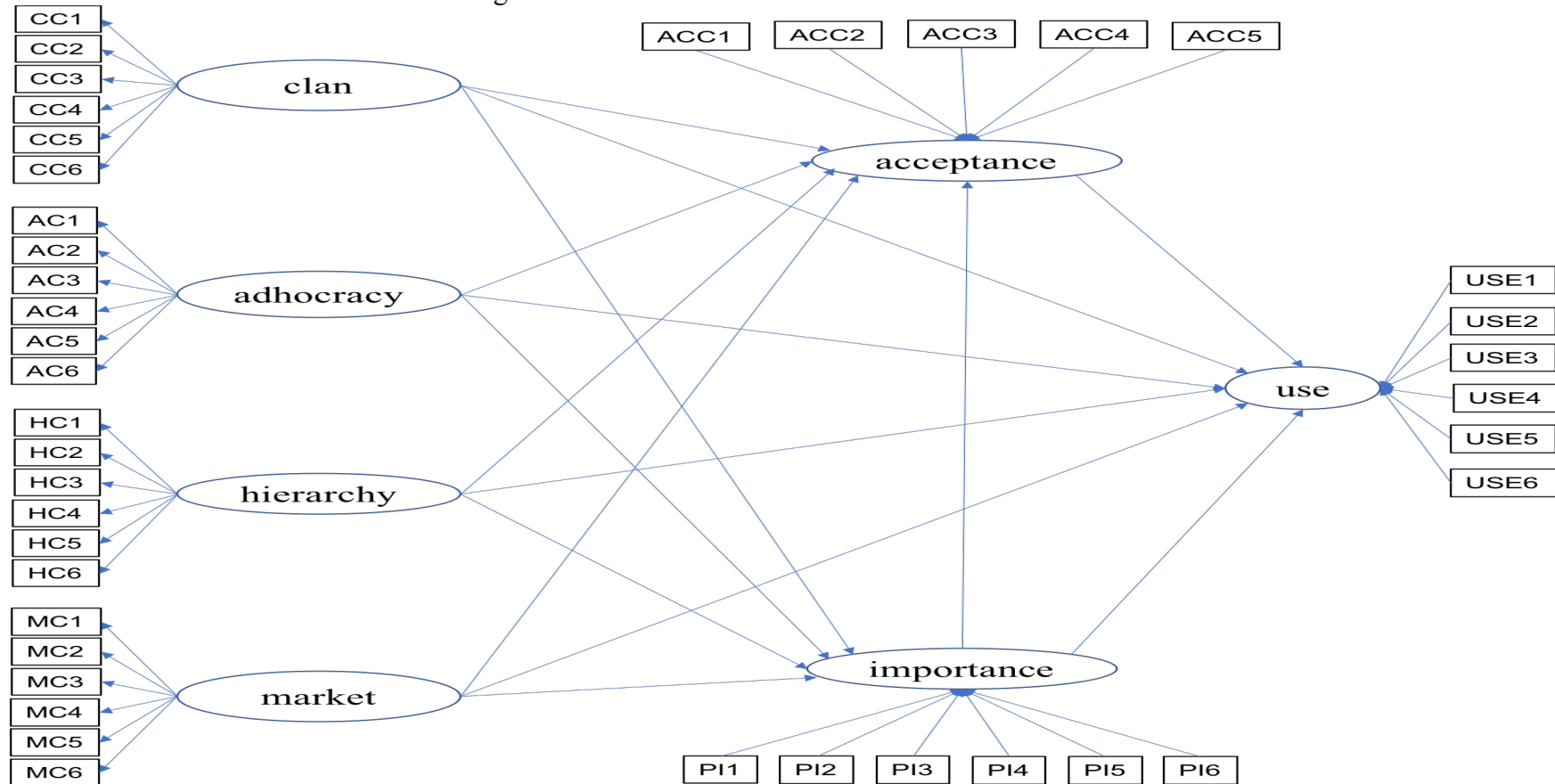


Figure 5.4 Structural model based on initial research framework



Remark:

CC1....6 = items of clan culture  
 AC1....6 = items of adhocracy culture  
 HC1....6 = items of hierarchy culture  
 MC1....6 = items of market culture

ACC1 .... 6 = items of PMS acceptance  
 PI1....6 = items of PMS perceived importance  
 USE1....6 = items of PMS use

### 5.7.1 Evaluation of measurement model (outer model)

The next step in PLS-SEM after determining structural model is evaluation of model measures (indicators). According to Hair et al. (2017, p. 111), assessment of reflective model involves (a) indicator reliability, measured by indicator loadings, (b) internal consistency, measured by cronbach's alpha and composite reliability, (c) convergent validity, measured by average variance extracted (AVE), and (d) discriminant validity, measured by Fornell-Larcker criterion. While formative model consists of (a) convergent validity, (b) collinearity between indicators, (c) Significance and relevance of outer weights. Table 5.6 summarizes measurements, criterion, description, and rule of thumbs for evaluation outer model.

Table 5.6 Summary of measurements, criterion, description, and rule of thumbs for evaluation outer model

Measures	Criterion	Description and Formula	Rule of thumbs	Source
Panel a. Reflective				
Indicator reliability	Indicator loadings	<ul style="list-style-type: none"> <li>- The regression coefficient <math>\lambda_{jk}</math> of the latent variable <math>\xi_j</math> in the regression of the manifest variable <math>x_{jk}</math> on the latent variable <math>\xi_j</math></li> <li>- Specifies which part of an indicator's variance can be explained by the underlying latent variable.</li> <li>- Estimated as follows:  <math display="block">\lambda_{jk} = \text{Cov}(x_{jk}, \xi_j) / \text{Var}(\xi_j)</math> </li> </ul>	<ul style="list-style-type: none"> <li>- Values significant at the <math>\alpha = 5\%</math> and loading (<math>\lambda</math>) &gt; 0.7</li> <li>- <math>\lambda</math> must not be lower than 0.4</li> </ul>	Chin (1998); Hair et al. (2017); Urbach & Ahlemann (2010)
Internal consistency	Cronbach's alpha	<ul style="list-style-type: none"> <li>- Measures the coherence of the responses across a subgroup of the questions related to a particular concept that is measuring the correlations of the observed indicator variables.</li> <li>- Calculated as follows:  <math display="block">\alpha = \left( \frac{N}{N-1} \right) \left( 1 - \frac{\sum_{i=1}^N \sigma_i^2}{\sigma_t^2} \right) \dots^{31}</math> </li> </ul>	<ul style="list-style-type: none"> <li>- <math>\alpha \geq 0.7</math></li> <li>- Values must not be lower than 0.6</li> </ul>	Chin (1998); Fornell & Bookstein (1982); Hair et al. (2017); Saunders et al. (2015); Urbach & Ahlemann (2010)
	Composite reliability	<ul style="list-style-type: none"> <li>- Takes into account the different outer loadings of the indicator variables for each concept.</li> <li>- Measures the degree to which the indicator variables load simultaneously when the construct increases.</li> <li>- Calculated as follows:  <math display="block">\rho = \frac{(\sum_i \lambda_{ij})^2}{(\sum_i \lambda_{ij})^2 + \sum_i \text{var}(\varepsilon_{ij})} \dots^{32}</math> </li> </ul>	<ul style="list-style-type: none"> <li>- <math>\text{CR} \geq 0.7</math></li> <li>- Values must not be lower than 0.6</li> </ul>	Bagozzi & Yi (1988); Chin (1998); Fornell & Bookstein (1982); Hair et al. (2017); Saunders et al. (2015)

<sup>31</sup> N is the number of indicators assigned to the factor.  $\sigma_i^2$  indicates the variance of indicator i.  $\sigma_t^2$  represents the variance of the sum of all the assigned indicators' scores. The average covariance among indicators is assumed to be positive.

<sup>32</sup>  $\lambda_i$  indicates the loading of indicator variable i of a latent variable,  $\varepsilon_i$  indicates the measurement error of indicator variable i, and j represents the flow index across all reflective measurement model.

Measures	Criterion	Description and Formula	Rule of thumbs	Source
Convergent validity	Average variance extracted (AVE)	<ul style="list-style-type: none"> <li>- Estimates how much an observed indicator variable correlates positively with alternative indicator variables of the same latent variable.</li> <li>- The amount of variance that the construct captures from its indicators about the amount due to measurement error.</li> <li>- Calculated as follows:  <math display="block">\rho = \frac{(\sum_i \lambda_i)^2}{(\sum_i \lambda_i)^2 + \sum_i var(\varepsilon_i)}</math> </li> </ul>	AVE > 0.5	Bagozzi & Yi (1988); Chin (1998); Fornell & Bookstein (1982); Hair et al. (2017); Saunders et al. (2015)
Discriminant validity	Fornell-Larcker criterion	Refers to whether a latent variable is truly distinct from other latent variables into the model. In other words, if the construct is unique and captures phenomena not represented in other constructs included in the same theoretical framework.	The AVE of each construct must be higher than the construct's highest squared correlation with any other construct.	Bagozzi & Yi (1988); Chin (1998); Fornell & Bookstein (1982); Fornell & Larcker (1981); Hair et al. (2017); Saunders et al. (2015)
Panel b. Formative				
Collinearity between indicators	Tolerance (TOL) and Variance Inflation Factor (VIF)	<ul style="list-style-type: none"> <li>- TOL represents the amount of variance of one formative indicator not explained by the other indicators in the same block. Estimated by <math>1 - R_{xi}^2</math></li> <li>- VIF is the reciprocal of the tolerance, where <math>VIF_{xi} = 1/TOL_{xi}</math>.</li> </ul>	<ul style="list-style-type: none"> <li>- TOL ≥ 0.20</li> <li>- VIFs ≤ 5.0</li> </ul>	Bollen & Lennox (1991); Diamantopoulos & Siguaw (2006); Hair et al. (2017)
Convergent validity	Path coefficients (Weightings)	The path coefficient of constructs with their items	<ul style="list-style-type: none"> <li>- Significances of Path coefficients (construct ↔ items)</li> <li>- Theoretical and empirical support</li> </ul>	Bollen & Lennox (1991); Diamantopoulos & Siguaw (2006); Hair et al. (2017); Hair et al. (2014)

### 5.7.2 Evaluation of structural model (inner model)

The next step in PLS-SEM after determining structural model is evaluation of model measures (indicators). According to Hair et al. (2017, p. 111), assessment of structural model consists of (1) collinearity issues, (2) significance and relevance of the structural model relationships, (3) Predictive power ( $R^2$  and  $f^2$ ), and (4) predictive relevance ( $q^2$ ). Table 5.7 summarizes measurements, criterion, description, and rule of thumbs for evaluation outer model.

Table 5.7 Summary of measurements, criterion, description, and rule of thumbs for evaluation structural model (inner model)

Measures	Criterion	Description and Formula	Rule of thumbs	Source
Collinearity issues	<ul style="list-style-type: none"> <li>- Tolerance</li> <li>- VIF</li> </ul>	<ul style="list-style-type: none"> <li>- TOL represents the amount of variance of a construct not explained by the other indicators in the same block. Estimated by <math>1 - R_{xi}^2</math></li> <li>- VIF is the reciprocal of the tolerance, where <math>VIF_{xi} = 1/TOL_{xi}</math>.</li> </ul>	<ul style="list-style-type: none"> <li>- <math>TOL \geq 0.20</math></li> <li>- <math>VIFs \leq 5.0</math></li> </ul>	Hair et al. (2017)
Significance and relevance of the structural model relationships	Path coefficient	Coefficients which represent the hypothesized relationships among the constructs.	<ul style="list-style-type: none"> <li>- The p value must be smaller than 0.05 to conclude that the relationship under consideration is significant at a 5% level</li> </ul>	Hair et al. (2017)
Predictive power	Coefficient determination ( $R^2$ )	The degree to which the model, relative to the mean, explains the observed variation in the dependent variable;	$R^2$ values of 0.75, 0.50, or 0.25 are substantial, moderate, or weak, respectively.	Hair et al. (2017); Henseler et al. (2009)
	Effect size ( $f^2$ )	<ul style="list-style-type: none"> <li>- The change in the <math>R^2</math> value when a specified exogenous construct is omitted from the model.</li> <li>- Calculated as follows:  <math display="block">f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}}</math> </li> </ul>	$f^2$ values: 0.35 (large), 0.15 (medium), and 0.02 (small)	Cohen (1988); Hair et al. (2017)
	Effect size ( $q^2$ )	<ul style="list-style-type: none"> <li>- The relative impact of predictive relevance estimated based on <math>Q^2</math> value, i.e. an indicator of the model's out-of-sample predictive power or predictive relevance</li> <li>- <math>Q^2</math> is calculated as follows,  <math display="block">Q^2 = 1 - \frac{\sum_D E_D}{\sum_D E_D}</math> where,  E = the sum of squares of prediction error;  O = the sum of squares error using the mean prediction; and  D = Omission distance</li> <li>- <math>q^2</math> Estimated as follows:  <math display="block">q^2 = \frac{q^2_{included} - q^2_{excluded}}{1 - q^2_{included}}</math> </li> </ul>	$f^2$ values: 0.35 (large), 0.15 (medium), and 0.02 (small)	Cohen (1988); Fornell & Cha (1994); Hair et al. (2017)

## 5.8 Descriptive analysis and results

### 5.8.1 Descriptive analysis of hospital cultures

The description analysis of hospital cultures is conducted by presenting the summation, the average and standard deviations in each type and dimension of organizational culture. As shown in Table 5.8, the culture with a highest average score is clan culture (mean: 27.89, standard Deviation, SD : 6.438), followed by hierarchy culture (mean: 26.06, SD : 4.836). The next culture is adhocracy (Mean: 23.44, SD : 4.836) and market (Mean: 22.62, SD : 4.072).

Table 5.8 Descriptive analysis of hospital cultures<sup>33</sup>

Cultures	N <sup>34</sup>	Sum <sup>35</sup>	Mean <sup>36</sup>	Std. Deviation <sup>37</sup>
Clan (CC)	1,356	37,819	27.89	6.438
Adhocracy (AC)	1,356	31,778	23.44	3.459
Market (MC)	1,356	30,671	22.62	4.072
Hierarchy (HC)	1,356	35,332	26.06	4.836

To identify significance of culture means' differences, a statistical analysis was conducted (Table 5.9). The statistical tool employed was a nonparametric Kruskal-Wallis<sup>38</sup> test due to normality issues and the nature of data that compare means' ranks (Table 5.9 Panel a: test of normality) (Daniel & Cross, 2012, pp. 704-705; Linebach et al., 2013).

Table 5.9 Mean difference test of culture types<sup>39</sup>

Panel a: tests of normality <sup>40</sup>					
	Kolmogorov-Smirnov		Shapiro-Wilk		Interpretation
	Statistic	df	Statistic	df	
Mean Clan	0.147	226	0.927	226	Not normally distributed
Mean Adhocracy	0.130	226	0.971	226	Not normally distributed
Mean Market	0.127	226	0.982	226	Not normally distributed
Mean hierarchy	0.093	226	0.978	226	Not normally distributed

<sup>33</sup> Data source: Appendix 2.

<sup>34</sup> Calculated by multiplying total respondents (226) and OCAI's dimensions (6). Six dimensions of OCAI: dominant characteristics (DC), organizational leadership (OL), organization glue (OG), strategic emphases (SE), management of employees (ME) and criteria of success (CS).

<sup>35</sup> total score of OCAI's six dimensions for specific culture. For example, a total score of clan culture is calculated by using formula:  $\sum_{n=i,j}^6 n = DC + OL + ME + OG + SE + CS = 6,077 + 6,120 + 6,195 + 6,217 + 6,355 + 6,855 = 37,819$ .

<sup>36</sup> The mean for each culture is calculated by using following formula:

$$Mean\ j = \frac{\sum_{i=1}^n x(i, j)}{n}$$

<sup>37</sup> Calculated by using the following formula:

$$\sigma = \sqrt{\frac{\sum_{j=1}^n (x(j) - mean\ j)^2}{n}}$$

<sup>38</sup> Kruskal-Wallis is one of non-parametric statistical techniques used for the samples which are not normally distributed, or when the data consist of ranks. The Kruskal-Wallis H value is calculated as follows:

$$H = \frac{12}{n(n+1)} \sum_{j=1}^k \frac{R_j^2}{n_j} - 3(n+1)$$

where, k = the number of samples,  $n_j$  = the number of observations in the  $j_{th}$  sample, n = the number of observations in all samples combined  $R_j$  = the sum of the ranks in the  $j_{th}$  sample (Kruskal & Wallis, 1952, p. 586).

<sup>39</sup> Data were analyzed using IBM® SPSS® for Windows version 25.00.

<sup>40</sup> See appendix 3

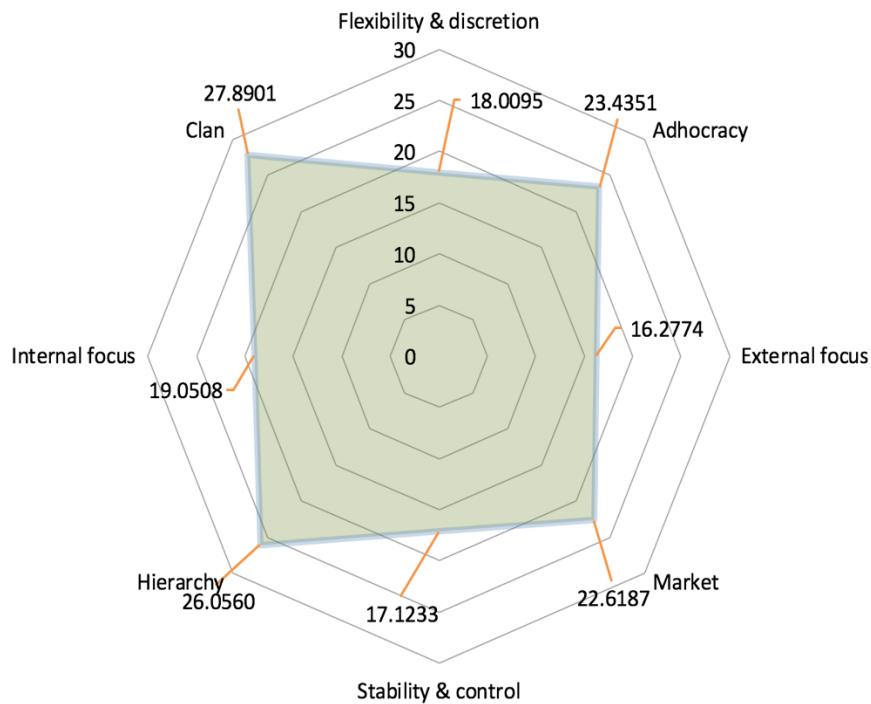
Panel b: Results of Kruskal-Wallis test (N = 904)<sup>41</sup>

- Test statistics	Kruskal-Wallis H	df	Asymp. Sig.	Hypothesis <sup>42</sup> decision
	100.339	3	0.0000	There is difference between means of culture types

Panel c: Results of Kruskal-Wallis pairwise comparison test<sup>43</sup>

Culture comparison	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Hypothesis decision
Market – Adhocracy	44.467	24.525	1.813	0.070	Statistically no difference
Market – Hierarchy	-192.389	24.525	-7.845	0.000	Statistically difference
Market – Clan	193.754	24.525	7.900	0.000	Statistically difference
Adhocracy – Hierarchy	-147.923	24.525	-6.032	0.000	Statistically difference
Adhocracy – Clan	149.288	24.525	6.087	0.000	Statistically difference
Hierarchy – Clan	1.365	24.525	.056	0.956	Statistically no difference

Figure 5.5 Hospital culture<sup>44</sup>



<sup>41</sup> See appendix 4

<sup>42</sup>  $H_0$  : the population centers are all equal.

$H_a$  : at least one of the populations tends to exhibit larger values than at least one of the other populations.

<sup>43</sup> See appendix 4

<sup>44</sup> Chart is produced by using an OCAI Excel template retrieved from <http://www.processinnovation.dk/OCTAT.xls>. The axis values of flexibility & discretion, stability & control, internal focus, and external are based on trigonometric calculation. For example, flexibility & discretion axis is calculated as follows:

Flexibility & discretion

$$= \frac{\text{clan}}{\sin \left( \left[ 180 - 45 - \cos^{-1} \left( \frac{\text{clan}}{\sqrt{\text{clan}^2 + \text{adhocracy}^2}} \right) \right] \times \frac{\pi}{180} \right)} \times \sin \left( \cos^{-1} \left( \frac{\text{clan}}{\sqrt{\text{clan}^2 + \text{adhocracy}^2}} \right) \times \frac{\pi}{180} \right)$$

Results of Kruskal-Wallis analysis show that the means of the four cultures are significantly different (Table 5.9 Panel b: Kruskal-Wallis test). Pairwise comparison analysis between culture means indicates that there is no significant difference between clan and hierarchy cultures as well as between market and adhocracy cultures (Table 5.9 Panel c: Results of Kruskal-Wallis pairwise comparison test). Meanwhile, the cultures are significantly different between market and hierarchy, market and clan, adhocracy and hierarchy, and adhocracy and clan.

Given on the mean scores and the results of Kruskal-Wallis test, it can be concluded that the hospital is now placing more emphasis on family culture and efforts to maintain system stability, order with existing controls and procedures, compared to the hospital's external focused culture such as competition and innovation (Figure 5.5).

Table 5.10 presents the results of culture diagnostics based on the six dimensions of CVF. It shows that except for organizational leadership, clan culture has highest mean scores within the CVF dimensions, while hierarchy is the highest one in organizational leadership. The findings also reveal that means' cultures were statistically different according to the Kruskal-Wallis test results.

Table 5.10 Dominant culture type per each dimension

Dimensions	Clan	Hierarchy	Adhocracy	Market	Culture with highest score <sup>45</sup>	Kruskal-Wallis H test <sup>46</sup> (H-values; df; p values)
Dominant characteristics	26.89	25.69	24.34	23.08	Clan	39.016; 3; 0.000
Organizational leadership	27.08	27.10	23.00	22.81	Hierarchy	73.120; 3; 0.000
Management of employee	27.41	26.11	23.62	22.87	Clan	44.110; 3; 0.000
Organizational glue	27.51	25.73	23.81	22.96	Clan	28.623; 3; 0.000
Strategic emphasis	28.12	26.04	22.99	22.85	Clan	64.207; 3; 0.000
Criteria of success	30.33	25.66	22.85	21.15	Clan	233.192; 3; 0.000

<sup>45</sup> Data source: Appendix 2.

<sup>46</sup> Data source: Appendix 4.



### 5.8.2 Descriptive analysis of acceptance of performance management system

Measurement of PMS acceptance construct includes five aspects of acceptance attitudes toward the PMS, namely acceptance of (1) financial measures, (2) non-financial measures, and (3) advanced techniques regarding the PMS use for performance evaluation purposes, (4) Perceived effectiveness of PMS, and (5) Perceived usefulness of PMS. Through the questionnaire, respondents were asked to choose the best answer to describing their response on current PMS used by hospital and the results are as follows (Table 5.11):

- a. Regarding the acceptance of financial measures, results show that none of the respondents strongly disagree, 1.33% were below neutral (Disagree), 40.27% were neutral, 49.56% were agree, and 8.85% were strongly agree regarding the acceptance of financial measures. The mean was 3.66 (above neutral) with SD 0.656.
- b. Regarding the acceptance of non-financial measures, results show that none of the respondents strongly disagree, about 1.33% were disagree, 37.17% were neutral, 49.12% were agree, and 12.39% were strongly agree regarding the acceptance of non-financial measures. The mean was 3.730 (above neutral) with SD 0.690.
- c. Regarding the acceptance of advanced techniques in PMS, i.e. BSC, results show that none of the respondents strongly disagree, about 2.65% were disagree, 46.02% were neutral, 37.61% were agree, and 132.72% were strongly agree regarding the acceptance of advanced techniques in PMS (BSC). The mean was 3.620 (above neutral) with SD 0.751.
- d. Regarding perceived effectiveness of PMS (BSC), results show that none of the respondents strongly disagree, 5.75% were disagree, 34.51% were neutral, 43.81% were agree, and 15.93% were strongly agree regarding the effectiveness of current PMS (BSC). The mean was 3.700 (above neutral) with SD 0.804.
- e. Regarding perceived useful of PMS (BSC), results shows that none of the respondents strongly disagree, 4.42% were disagree, 34.96% were neutral, 47.79% were agree, and 12.83% were strongly agree regarding the useful of current PMS (BSC). The mean was 3.690 (above neutral) with SD 0.749.
- f. Overall statistics show that none of the respondents strongly disagree, 3.10% were disagree, 38.58% were neutral, 45.58% were agree, and 12.74% were strongly agree regarding the acceptance of current PMS (BSC). The mean value is 3.680 (above neutral) with SD = 0.731 indicate that MCGH employees can accept the PMS currently used by hospital.

It can be noted from Table 5.11 that the highest value mean goes to the acceptance of non-financial measures as an evaluation tool for employees. The second rank is the perceived effectiveness of PMS, followed by the usefulness of PMS, acceptance of financial measures,

and acceptance of advanced techniques of PMS, respectively. The items were not statistically different according to the results of Kruskal-Wallis test (Table 5.11 Panel c).

Table 5.11 Descriptive statistics on the acceptance of PMS

Panel a. Frequency, mean and standard deviation<sup>47</sup>

	Items	Frequency	Percent	Mean	Std. Dev.
a.	Acceptance of financial measures (ACC1)	226	100.00	3.660	0.656
	Strongly Disagree	-	-		
	Disagree	3	1.33		
	Neutral	91	40.27		
	Agree	112	49.56		
	Strongly Agree	20	8.85		
b.	Acceptance of non-financial measures (ACC2)	226	100.00	3.730	0.690
	Strongly Disagree	-	-		
	Disagree	3	1.33		
	Neutral	84	37.17		
	Agree	111	49.12		
	Strongly Agree	28	12.39		
c.	Acceptance of adv. techniques (BSC) (ACC3)	226	100.00	3.620	0.751
	Strongly Disagree	-	-		
	Disagree	6	2.65		
	Neutral	104	46.02		
	Agree	85	37.61		
	Strongly Agree	31	13.72		
d.	Perceived effectiveness of PMS (ACC4)	226	100.00	3.700	0.804
	Strongly Disagree	-	-		
	Disagree	13	5.75		
	Neutral	78	34.51		
	Agree	99	43.81		
	Strongly Agree	36	15.93		
e.	Perceived usefulness of PMS (ACC5)	226	100.00	3.690	0.749
	Strongly Disagree	-	-		
	Disagree	10	4.42		
	Neutral	79	34.96		
	Agree	108	47.79		
	Strongly Agree	29	12.83		
f.	Summary	1,130	100.00	3.680	0.731
	Strongly Disagree	-	-		
	Disagree	35	3.10		
	Neutral	436	38.58		
	Agree	515	45.58		
	Strongly Agree	144	12.74		

<sup>47</sup> Data source: Appendix 2 and 3.

Panel b. Items' normality test<sup>48</sup> (df = 226)

Items	Kolmogorov-Smirnov	Shapiro-Wilk	Interpretation
Acceptance of financial measures	0.282	0.798	Not normally distributed
Acceptance of non-financial measures	0.270	0.815	Not normally distributed
Acceptance of advanced techniques	0.284	0.822	Not normally distributed
Perceived effectiveness of PMS	0.243	0.861	Not normally distributed
Perceived useful of PMS	0.267	0.846	Not normally distributed

Panel c. Kruskal-Wallis H test of mean difference<sup>49</sup>

Kruskal-Wallis H	df	Sign	Interpretation
3.573	4	0.467	Statistically no difference

### 5.8.3 Descriptive analysis of the perceived importance and the use of performance measurement system

Measurement of perceived importance and the use of PMS includes six dimensions of the PMS measures, i.e. perceived importance and the use of (1) financial measures, (2) costumer (patient) measures, (3) innovation measures, (4) employee measures, (5) quality measures, and (6) community measures. Those measures reflect the four BSC perspectives, i.e. financial measures for financial perspective, patient and community for customer perspective, quality for internal process perspective, and innovation and employee for learning and growth perspective (Gurd & Gao, 2007).

Descriptive statistics of the perceived importance of PMS are described as follows (Table 5.12):

- About 25.66% of the respondents considered the use of financial measures to be 'moderately important', about 51.33% of the respondents answered that the measures are 'important', about 23.01% of the respondents felt the measures are 'extremely important'. There was no respondent that answered 'not important' and 'not important at all' according to the importance of financial measures. The mean value of the perceived importance of using financial measures was 3.97 (i.e. nearly important) with SD 0.699.
- About 11.50% of the respondents considered the use of customer measures to be 'moderately important', about 52.65% of the respondents answered that the measures are 'important', and about 35.84% of the respondents felt that the customer measures are 'extremely important'. There was no respondent that answered 'not important' and 'not important at all' according to the importance of customer measures. The mean value of the

<sup>48</sup> Data source appendix 3.

<sup>49</sup> Data source appendix 5.

perceived importance of using customer measures was 4.24 (i.e. above important) with SD 0.645.

- c. About 1.33% of the respondents considered the use of innovation measures to be 'not important', about 39.82% of the respondents answered that the measures are 'moderately important', about 20.35% of the respondents perceived that the measures are 'important', and about 38.50% of the respondents felt that the innovation measures are 'extremely important'. There was no respondent that answered 'not important at all' according to the importance of innovation measures. The mean value of the perceived importance of using innovation measures was 3.96 (i.e. nearly important) with SD 0.916.
- d. About 43.81% of the respondents considered the use of employee measures to be 'moderately important', about 27.88% of the respondents answered that the measures are 'important', and about 28.32% of the respondents felt that the employee measures are 'extremely important'. There was no respondent that answered 'not important' and 'not important at all' according to the importance of employee measures. The mean value of the perceived importance of using employee measures was 3.85 (i.e. nearly important) with SD 0.837.
- e. About 23.89% of the respondents considered the use of quality measures to be 'moderately important', about 23.89% of the respondents answered that the measures are 'important', and about 22.12% of the respondents felt that the quality measures are 'extremely important'. There was no respondent that answered 'not important' and 'not important at all' according to the importance of quality measures. The mean value of the perceived importance of using quality measures was 3.98 (i.e. nearly important) with SD 0.680.
- f. About 0.44% of the respondents considered the use of community measures to be 'not important', about 53.98% of the respondents answered that the measures are 'moderately important', about 27.88% of the respondents perceived that the measures are 'important', and about 17.70% of the respondents felt that the community measures are 'extremely important'. There was no respondent that answered 'not important at all' according to the importance of community measures. The mean value of the perceived importance of using innovation measures was 3.63 (i.e. below important) with SD 0.774.
- g. Overall statistics show that about 0.29% of the respondents perceived that all the measures within the PMS (i.e. BSC) are 'not important', about 33.11% perceived that all the performance measures are 'moderately important', about 39.01% answered that all the performance measures are 'important', and 27.58% felt that the performance measures are 'extremely important'. There was no respondent with the 'not important at all' answer. The

mean value of 3.940 (i.e. nearly important) with SD = 0.784 indicate that most of MCGH employees perceived that the six measures were important.

The highest value mean is customer (patient) measures, followed by quality, financial, innovation, employee, and community measures, respectively. The items were statistically different according to the results of Kruskal-Wallis test (Tabel 5.12 Panel c).

Table 5.12 Descriptive statistics on the perceived importance of PMS

Panel a. Frequency, mean and standard deviation <sup>50</sup>				
Items and scale	Frequency	Percent	Mean	Std. Dev.
1. Financial measures (PI1)	226	100.00	3.970	0.699
Not important at all	-	-		
Not important	-	-		
Moderately important	58	25.66		
Important	116	51.33		
Extremely important	52	23.01		
2. Patient measures (PI2)	226	100.00	4.240	0.645
Not important at all	-	-		
Not important	-	-		
Moderately important	26	11.50		
Important	119	52.65		
Extremely important	81	35.84		
3. Innovation measures (PI3)	226	100.00	3.960	0.916
Not important at all	-	-		
Not important	3	1.33		
Moderately important	90	39.82		
Important	46	20.35		
Extremely important	87	38.50		
4. Employee measures (PI4)	226	100.00	3.850	0.837
Not important at all	-	-		
Not important	-	-		
Moderately important	99	43.81		
Important	63	27.88		
Extremely important	64	28.32		
5. Quality measures (PI5)	226	100.00	3.980	0.680
Not important at all	-	-		
Not important	-	-		
Moderately important	54	23.89		
Important	122	53.98		
Extremely important	50	22.12		
6. Community measures (PI6)	226	100.00	3.630	0.774
Not important at all	-	-		
Not important	1	0.44		
Moderately important	122	53.98		
Important	63	27.88		
Extremely important	40	17.70		

<sup>50</sup> Data source appendix 2 and 3.

Items and scale	Frequency	Percent	Mean	Std. Dev.
Overall Statistics	1,356	100.00	3.940	0.784
Not important at all	-	-		
Not important	4	0.29		
Moderately important	449	33.11		
Important	529	39.01		
Extremely important	374	27.58		

Panel b. Items' normality test<sup>51</sup>

Items	Kolmogorov-Smirnov (df = 226)	Shapiro-Wilk (df = 226)	Interpretation (p<0.05 ; Sign = 0.000)
Financial measures	0.259	0.806	Not normally distributed
Customer measures	0.289	0.778	Not normally distributed
Innovation measures	0.264	0.777	Not normally distributed
Employee measures	0.282	0.769	Not normally distributed
Quality measures	0.271	0.801	Not normally distributed
Community measures	0.336	0.751	Not normally distributed

Panel c. Kruskal-Wallis H test of mean difference<sup>52</sup>

Kruskal-Wallis H	df	Sign	Interpretation
76.705	5	0.000	Statistically difference

Descriptive statistics of the use of PMS are described as follows (Table 5.13):

- About 15.66% of the respondents had occasionally used (slightly used) the financial measures, about 33.19% of the respondents answered that they moderately used the financial measures, about 36.73% of the respondents felt that they significantly used the measures, and about 15.04% of the respondents stated that they highly used the financial measures. There was no respondent that answered 'not used at all'. The mean value of the using financial measures was 3.52 (i.e. above moderately used) with SD 0.925.
- About 11.06% of the respondents had slightly used the customer measures, about 27.88% of the respondents answered that they moderately used the measures, about 44.25% of the respondents felt that they significantly used the measures, and about 16.81% of the respondents stated that they highly used the customer measures. None of the respondents that answered 'not used at all'. The mean value of the using customer measures was 3.67 (i.e. above moderately used) with SD 0.885.
- About 25.66% of the respondents had slightly used the innovation measures, about 39.38% of the respondents answered that they moderately used the measures, about 27.43% of the

<sup>51</sup> Data source appendix 3.

<sup>52</sup> Data source appendix 5.

respondents felt that they significantly used the measures, and about 7.25% of the respondents stated that they highly used the innovation measures. None of the respondents that answered 'not used at all'. The mean value of the using innovation measures was 3.67 (i.e. above moderately used) with SD 0.885.

- d. About 8.85% of respondents stated that they slightly used the employee measures, 43.36% felt moderately used, 36.73% felt significantly used, and 11.06% acknowledged that they extremely used the employee measures. None of the respondents answered 'not use at all' according to the employee measures. The mean was 3.50 (above moderately used) with SD 0.807.
- e. About 9.73% of respondents stated that they slightly used the quality measures, 31.42% felt moderately used, 42.04% felt significantly used, and 16.81% acknowledged that they extremely used the quality measures. None of the respondents answered 'not use at all' according to use of quality measures. The mean was 3.66 (above moderately used) with SD 0.871.
- f. About 14.16% of respondents stated that they slightly used the community measures, 14.16% felt moderately used, 38.05% felt significantly used, and 15.93% acknowledged that they extremely used the community measures. None of the respondents answered 'not used at all' according to the community measures. The mean was 3.52 (above moderately used) with SD 0.925.
- g. Overall statistics show that about 14.09% were stated slightly used, 34.51% stated moderately used, 37.54% stated significantly, 13.86% stated that they are extremely used all PMS indicators, and there was no respondent answered 'not use at all'. The mean value of 3.510 with SD = 0.900 indicate that MCGH employees, in general, moderately used the BSC indicators.

The highest value mean is customer (patient) measures, followed by quality, community, financial, employee, and innovation measures, respectively. Results of Kruskal-Wallis test also reveal that the items were statistically different as shown in Tabel 5.13 Panel c.

Table 5.13 Descriptive statistics on the use of PMS

Panel a. Frequency, mean and standard deviation <sup>53</sup>				
Items and scale	Frequency	Percent	Mean	Std. Dev.
1. Financial measures (USE1)	226	100.00	3.520	0.925
Not used at all	-	-		
Slightly used	34	15.04		
Moderately used	75	33.19		
Significantly used	83	36.73		
Highly used	34	15.04		
2. Patient measures (USE2)	226	100.00	3.670	0.885
Not used at all	-	-		
Slightly used	25	11.06		
Moderately used	63	27.88		
Significantly used	100	44.25		
Highly used	38	16.81		
3. Innovation measures (USE3)	226	100.00	3.170	0.898
Not used at all	-	-		
Slightly used	58	25.66		
Moderately used	89	39.38		
Significantly used	62	27.43		
Highly used	17	7.52		
4. Employee measures (USE4)	226	100.00	3.500	0.807
Not used at all	-	-		
Slightly used	20	8.85		
Moderately used	98	43.36		
Significantly used	83	36.73		
Highly used	25	11.06		
5. Quality measures (USE5)	226	100.00	3.660	0.871
Not used at all	-	-		
Slightly used	22	9.73		
Moderately used	71	31.42		
Significantly used	95	42.04		
Highly used	38	16.81		
6. Community measures (USE6)	226	100.00	3.560	0.923
Not used at all	-	-		
Slightly used	32	14.16		
Moderately used	72	31.86		
Significantly used	86	38.05		
Highly used	36	15.93		
Overall Statistics	1,356	100.00	3.510	0.900
Not used at all	-	-		
Slightly used	191	14.09		
Moderately used	468	34.51		
Significantly used	509	37.54		
Highly used	188	13.86		
Panel b. Items' normality test (df = 226, p<0.05) <sup>54</sup>				
Items	Kolmogorov-Smirnov	Shapiro-Wilk	Interpretation	
Financial measures	0.217	0.88	Not normally distributed	
Customer measures	0.257	0.87	Not normally distributed	
Innovation measures	0.225	0.866	Not normally distributed	

<sup>53</sup> Data source appendix 2 and 5.<sup>54</sup> Data source appendix 3.



Employee measures	0.254	0.862	Not normally distributed
Quality measures	0.241	0.873	Not normally distributed
Community measures	0.224	0.879	Not normally distributed
Panel c. Kruskal-Wallis H test of mean difference <sup>55</sup>			
Kruskal-Wallis H	df	Sign	Interpretation
46.689	5	0.000	Statistically different

As presented in Table 5.14 Panel b, results of Kruskal-Wallis test on the total scores of the perceived important and the use of PMS show that the two constructs were statistically different. When items between constructs were compared in pairwise using nonparametric Mann Whiney U test, only community item was statistically equal. Other items, namely financial, customer, innovation, employee, and quality, were statistically difference.

Table 5.14 Comparison of mean values of perceived importance and use constructs

Panel a: Comparison of mean values of perceived importance and use constructs

Items	Importance		Use	
	Mean	Rank	Mean	Rank
Financial	696.39	3	681.25	4
Customer	823.56	1	745.94	1
Innovation	687.58	4	537.91	6
Employee	631.65	5	668.33	5
Quality	701.05	2	739.50	2
Community	530.77	6	698.06	3

Panel b: Test statistics of the perceived importance and the use of PMS<sup>56</sup>

1) Between two constructs	Mann-Whitney U	Wilcoxon W	df.	Sig.	Interpretation
Importance vs Use	692,300	1,612,346	-11.765	0.000	Statistically different
2) Between constructs' items	Mann-Whitney U	Wilcoxon W	Z	Sign	Interpretation
Importance vs Use	692,300	1,612,346	-11.765	0.000	Statistically different
Financial	18,603	44,254	-5.318	0.000	Statistically different
Customer	16,418	42,069	-7.082	0.000	Statistically different
Innovation	14,654	40,305	-8.219	0.000	Statistically different

<sup>55</sup> Data source appendix 5.

<sup>56</sup> Data source appendix 6.

Employee	20,533	46,184	-3.852	0.000	Statistically different
Quality	20,480	46,131	-3.926	0.000	Statistically difference
Community	25,183	50,834	-0.273	0.785	Statistically not different

## 5.9 PLS-SEM analysis and results

### 5.9.1 Outer model evaluation analysis and results

As have been mentioned in sub-section 5.7.1, evaluation of measurement model (outer model) involves evaluation of 1) indicator reliability, 2) internal consistency, 3) convergent validity, and 4) discriminant validity for reflective measurement model. Meanwhile, evaluation of formative model involves evaluation of convergent validity and collinearity between items<sup>57</sup>. In this study, culture's constructs were designed as reflective model, while the acceptance, the importance and the use of PMS constructs were designed as formative model. Evaluation of reflective constructs will be done first then followed by formative constructs.

Based on the rule of thumbs in Table 5.6, assessment of the culture constructs item loadings was firstly conducted and the final results of loadings' evaluation are in presented in Table 5.16. Some items were dropped due to the poor of item loadings that will cause reliability issues, namely AC4 and AC5 of adhocracy construct, HC2 and HC6 of hierarchy construct, and MC1, MC5 and MC6 of market constructs (Table 5.15). All the dropped items have loadings values below 7.00. Table 5.16 shows the final items that will be included in further analysis. All loadings were above the 0.7 threshold (Hair et al., 2017; Hair et al., 2014). All values of average variance extracted (AVE) are higher than 0.5 and CR (composite reliability) are greater than 0.700 (Hair et al., 2014).

Table 5.17 shows the AVE, latent variables correlation, and a diagonal-square root AVEs, or cross-loading of all latent variables. All the cross-loading are larger than 0.7 and are larger than each correlation value of the constructs. AVE value of each latent factor exceeded the respective squared correlation between latent variables, which indicate evidences of discriminant validity (Fornell & Larcker, 1981).

<sup>57</sup> See Table 5.6 Summary of measurements, criterion, description, and rule of thumbs for evaluation outer model

Table 5.15 Process of items' loadings evaluation

Items	Items' loadings in each iteration <sup>58</sup>								Included in/ dropped from model
Adhocracy	I	II	III	IV	V	VI	VII	VIII	
AC1	0.770	0.769	0.776	0.783	0.784	0.782	0.782	0.777	Included
AC2	0.782	0.782	0.780	0.778	0.777	0.779	0.783	0.783	Included
AC3	0.849	0.850	0.850	0.852	0.852	0.853	0.849	0.852	Included
AC4	0.485	-	-	-	-	-	-	-	<i>Dropped</i>
AC5	0.542	0.541	0.533	-	-	-	-	-	<i>Dropped</i>
AC6	0.721	0.720	0.716	0.707	0.707	0.707	0.709	0.711	Included
Clan	I	II	III	IV	V	VI	VII	VIII	
CC1	0.786	0.786	0.786	0.786	0.786	0.786	0.786	0.787	Included
CC2	0.752	0.752	0.752	0.752	0.752	0.751	0.752	0.752	Included
CC3	0.826	0.826	0.826	0.826	0.827	0.827	0.826	0.826	Included
CC4	0.745	0.745	0.746	0.746	0.747	0.747	0.747	0.746	Included
CC5	0.742	0.742	0.741	0.741	0.741	0.741	0.742	0.742	Included
CC6	0.737	0.737	0.736	0.736	0.736	0.736	0.736	0.736	Included
Hierarchy	I	II	III	IV	V	VI	VII	VIII	
HC1	0.742	0.742	0.742	0.741	0.741	0.744	0.758	0.786	Included
HC2	0.630	0.630	0.629	0.630	0.629	0.626	-	-	<i>Dropped</i>
HC3	0.733	0.733	0.731	0.731	0.730	0.730	0.723	0.727	Included
HC4	0.669	0.669	0.672	0.672	0.674	0.674	0.698	0.721	Included
HC5	0.753	0.754	0.755	0.755	0.755	0.753	0.747	0.745	Included
HC6	0.666	0.666	0.664	0.664	0.663	0.663	0.662	-	<i>Dropped</i>
Market	I	II	III	IV	V	VI	VII	VIII	
MC1	0.567	0.567	0.568	0.568	0.557	-	-	-	<i>Dropped</i>
MC2	0.711	0.711	0.731	0.731	0.746	0.747	0.750	0.751	Included
MC3	0.742	0.742	0.760	0.760	0.781	0.825	0.823	0.821	Included
MC4	0.735	0.735	0.738	0.738	0.752	0.770	0.771	0.772	Included
MC5	0.525	0.526	-	-	-	-	-	-	<i>Dropped</i>
MC6	0.583	0.583	0.565	0.565	-	-	-	-	<i>Dropped</i>

Table 5.16 Final result of items' validation for reflective models<sup>59</sup>

Constructs	Items	Loadings	t statistics	Cronbach's Alpha	CR	AVE
Adhocracy	AC1	0.777	2.587	0.797	0.863	0.612

<sup>58</sup> Data source: Appendix 7 to 14.<sup>59</sup> Data source: Appendix 14

Constructs	Items	Loadings	t statistics	Cronbach's Alpha	CR	AVE
Clan	AC2	0.783	2.752	0.859	0.894	0.586
	AC3	0.852	2.548			
	AC6	0.711	2.362			
	CC1	0.787	9.187			
	CC2	0.752	8.294			
	CC3	0.826	9.852			
Hierarchy	CC4	0.746	8.905	0.739	0.833	0.555
	CC5	0.742	8.185			
	CC6	0.736	8.526			
	HC1	0.786	5.697			
	HC3	0.727	4.467			
Market	HC4	0.721	5.520	0.686	0.825	0.611
	HC5	0.745	4.664			
	MC2	0.751	7.429			
	MC3	0.821	8.150			
	MC4	0.772	8.846			

Table 5.17 Correlations and measures of validity among variables (Discriminant Validity)

Constructs	AVE	Adhocracy	Clan	Hierarchy	Market
Adhocracy	0.612	<b>0.782<sup>60</sup></b>			
Clan	0.586	-0.034	<b>0.765</b>		
Hierarchy	0.555	-0.387	-0.661	<b>0.745</b>	
Market	0.611	-0.365	-0.652	0.343	<b>0.782</b>

Results of formative indicators' assessments show that all VIFs' items are below 5 (Table 5.18), indicating that there were no multicollinearity issues among the items (Hair et al., 2017; Hair et al., 2014). However, the items' weights were mostly not significantly related to their constructs. None of the acceptance items were significant, while only two items were significant in the PMS perceived importance (PI1 and PI6) and the PMS use (USE4 and USE6) constructs (Table 5.18).

<sup>60</sup> Is square root of AVE,  $\sqrt{AVE} = \sqrt{0.612} = 0.782$

Table 5.18 Summary results of formative assessment

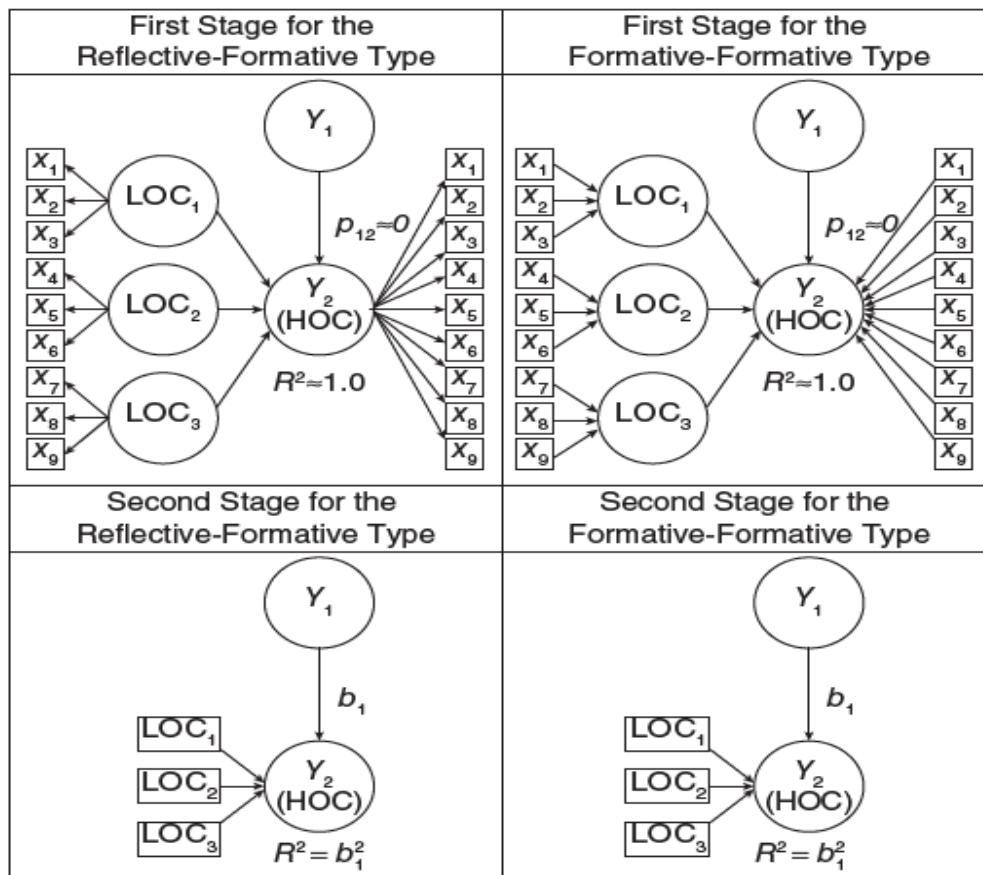
Constructs	Items	Weights <sup>61</sup>	t statistics	VIF <sup>62</sup>
PMS Acceptance	ACC1	0.329	1.418	1.072
	ACC2	0.195	0.806	1.044
	ACC3	0.371	1.276	1.146
	ACC4	0.407	1.263	1.138
	ACC5	0.351	1.347	1.148
PMS Perceived Importance	PI1	0.473	2.128*	1.408
	PI2	0.135	0.524	1.209
	PI3	0.087	0.500	1.120
	PI4	0.292	1.367	1.236
	PI5	0.273	1.365	1.249
	PI6	0.525	2.838*	1.106
PMS Use	USE1	0.316	1.564	1.092
	USE2	0.299	1.261	1.097
	USE3	0.327	1.264	1.178
	USE4	0.448	2.019*	1.122
	USE5	0.308	1.631	1.117
	USE6	0.607	3.242*	1.127

\* p&lt;0.05

In the situation where formative constructs have a very limited number of items that are significantly related to the constructs, while removing any of formative items might theoretically change the meaning of the constructs since they are not interchangeable, Hair et al. (2014), Lowry & Gaskin (2014), and Lohmöller (1989, pp. 130-133) suggested an approach called repeated indicator approach to solve such situation. The repeated indicator<sup>63</sup> involves two stages analysis: first, estimating the latent variable scores for the lower order constructs (LOCs), and second, employing the LOCs as manifest variables for the higher order constructs (HOCs) (Hair et al., 2017, p. 298) (Figure 5.6).

<sup>61</sup> Data source: Appendix 14<sup>62</sup> Data source: Appendix 15<sup>63</sup> Also known as two-stage hierarchical component model (Hair et al., 2017, p. 298).

Figure 5.6 Two-Stage Approach for HCM Analysis



Source: adopted from (Hair et al., 2017)

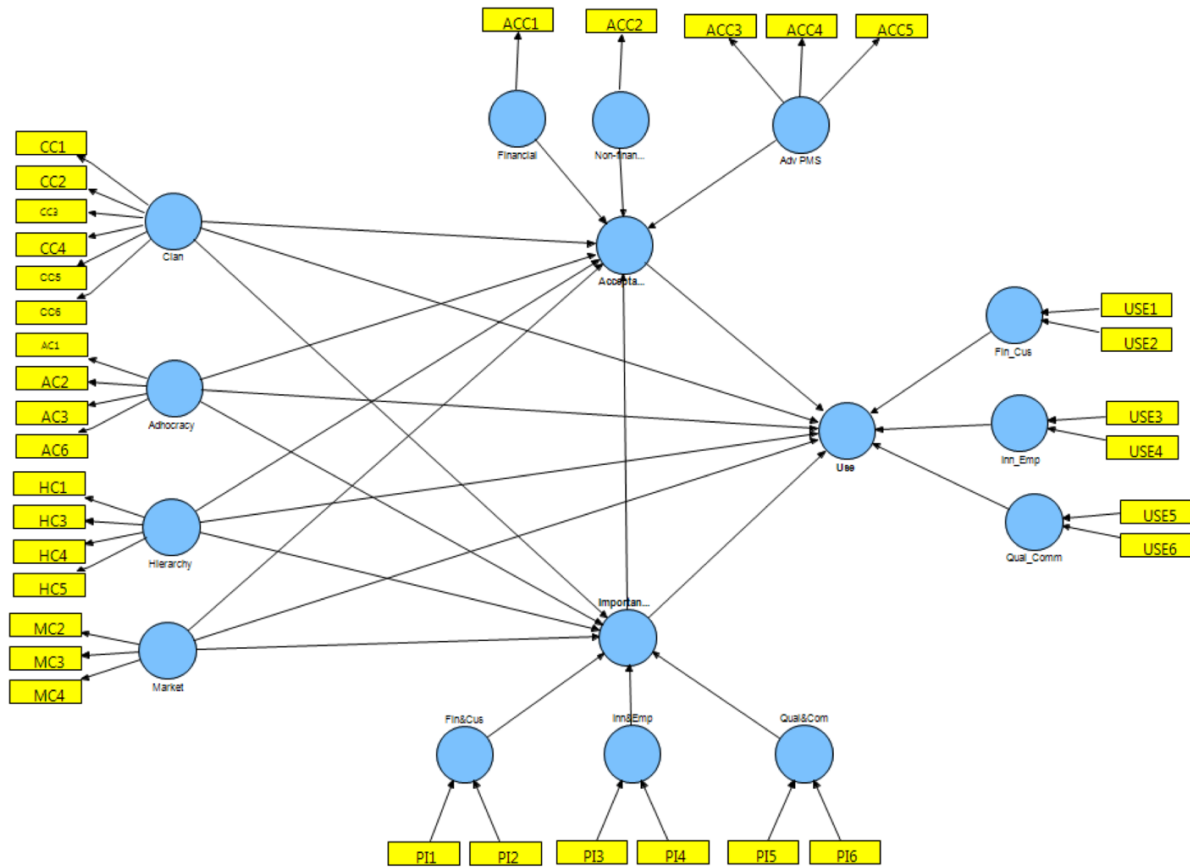
Lowry & Gaskin (2014) mentioned that repeated indicator approach can be used in a situation that removing formative items is avoided by the researcher in order to maintain the concept behind the construct. For example, each item of endogenous PMS use is representation of BSC perspectives used by the hospital. The items consist of one item for financial measure (USE1) and five items for non-financial measures, namely patient (USE2), innovation (USE3), employee (USE4), quality (USE5), and community (USE6). As such, the items were not interchangeable and dropping one of them will change the meaning of PMS use construct.

Under repeated indicator approach, initial structural model as appeared in Figure 5.3 and Figure 5.4 should be modified into a new structural model as appeared in Figure 5.7 First, three LOCs were built under PMS acceptance<sup>64</sup>, namely (1) financial construct<sup>65</sup> with ACC1 as the observed variable, (2) Non-financial with ACC2 as the observed variables, and (3) Advanced PMS with ACC3, ACC4, and ACC5.

<sup>64</sup> Here, PMS acceptance, as well as PMS importance and PMS use, will be higher order constructs (HOCs).

<sup>65</sup> Financial construct, as well as non-financial, advanced PMS, financial and customer, innovation and employee, and quality and community become lower order constructs (LOCs).

Figure 5.7 First stage of repeated indicator model<sup>66</sup>



*Second*, three LOCs were created under the perceived importance, namely (1) financial and customer LOC (Fin&Cus) with PI1 and PI2 as the observed variables, (2) innovation and employee LOC (Inn&Emp) with PI3 and PI4 as the observed, and (3) quality and community LOC (Qua&Com) with PI5 and PI6 as the observed variables. *Third*, three LOCs were also created under the PMS use, namely (1) financial and customer LOC (Fin\_Cus) with USE1 and USE2 as the observed variables, (2) innovation and employee LOC (Inn\_emp) with USE3 and USE4 as the observed variables, and (3) quality and community LOC (Qua\_Com) with USE5 and USE6 (items that measure frequency of the use of quality and community measures, respectively) as the observed variables.

After determining the HOCs and LOCs, the next step is conducting the first stage of the repeated indicator approach, i.e. estimating the latent scores of LOCs and HOCs<sup>67</sup>. Results of the first stage were also applied for assessing outer model of the LOCs. As highlighted in Table 5.19, the repeated indicator approach works well since the three LOCs of HOCs have higher weights compared to item weights in Table 5.18. As shown in Table 19, each first-order

<sup>66</sup> Figure was produced using SMARTPLS 2.0 M3 (Ringle et al., 2015).

<sup>67</sup> Data source: Appendix 16

construct produces positive and significant coefficients (t-statistics > 1.96). Each dimension also resulted VIFs that are under 5, indicating that there were no longer multicollinearity issues.

Table 5.19 Formative repeated indicators validation

Higher-order constructs	First-order constructs	Items	Weights <sup>68</sup>	t-statistics	VIF
PMS Acceptance	Financial	ACC1	0.296	6.009	1.123
	Non-financial	ACC2	0.246	4.014	1.078
	Advanced PMS	ACC3	0.801	15.585	1.326
		ACC4			
		ACC5			
PMS Perceived Importance	Financial & Customer	PI1	0.348	2.102	1.252
		PI2			
	Innovation & Employee	PI3	0.480	3.167	1.218
		PI4			
	Quality and Community	PI5	0.588	4.747	1.431
		PI6			
PMS Use	Financial & Customer	USE1	0.328	3.878	1.247
		USE2			
	Innovation & Employee	USE3	0.701	13.576	1.094
		USE4			
	Quality and Community	USE5	0.403	6.011	1.293
		USE6			

\* p<0.05

### 5.9.2 Inner model evaluation (evaluation of structural model)

Evaluation of inner model, or structural model, were based on the rule of thumbs described in Sub section 5.7.2. The evaluation involves assessment of (1) collinearity issues (tolerance and VIF), (2) significance of the structural model relationships (path coefficient), and (3) predictive power (Coefficient determination  $R^2$ , Effect size  $f^2$ , Effect size  $q^2$ ).

Results of collinearity diagnosis as the first step of inner model evaluation are presented in Table 5.20. The table exhibits correlation among exogenous variables, tolerance (TOL) and VIF values. A tolerance value of 0.20 or lower and a VIF value of 5 and higher, respectively, indicate a potential collinearity problem (Hair et al., 2017, p. 158), while Lowry & Gaskin (2014) suggested VIF should be under 3.3 for more rigorous testing. As such, clan, market, and hierarchy constructs that have VIFs higher than 3.3 were considered to suffer from multicollinearity issues. Moreover, clan construct is strongly correlated to hierarchy (-0.657) and market (-0.654).

<sup>68</sup> Data source: Appendix 17



Table 5.20 Correlation between constructs, TOL and VIFs

Constructs	Correlation between constructs <sup>69</sup>					Collinearity statistics <sup>70</sup>	
	Clan	Adhocracy	Market	Hierarchy	Acceptance	TOL	VIF
Clan	1.000					0.153	6.544
Adhocracy	-0.013	1.000				0.327	3.058
Market	-0.654	-0.375	1.000			0.263	3.807
Hierarchy	-0.657	-0.403	0.334	1.000		0.244	4.091
Acceptance	0.084	-0.053	-0.036	-0.08	1.000	0.772	1.295
Importance	0.211	-0.094	-0.096	-0.154	0.475	0.738	1.356

According to Hair et al. (2017, p. 159), there are three options for solving the collinearity issues; (1) eliminating the constructs, (2) merging their predictors, or (3) establishing a higher-order constructs. Combination of option (1) and (2) were chosen to remedy the multicollinearity issues. First, the exogenous cultures were merged into two groups of constructs within three models. This step was aimed to identify loadings of a variable when merged with another variable (Table 5.21). Second, based on loadings resulted by model options, model option 2 in Table 5.20: Panel A was considered better than model 1 and model 3 because all constructs' loadings in model 2 were positive with only adhocracy that has small loadings.

Based on results of model option 2, adhocracy indicator was eliminated and loadings were recalculated which resulted as follows (Table 5.21: Panel B):

- 1) loadings values of 1.000, 0.812, and 0.822 for clan, hierarchy, and market indicators, respectively;
- 2) tolerance values of 0.356, 0.552, and 0.556 for clan, hierarchy, and market indicators, respectively; and
- 3) VIF values of 2.811, 1.810, and 1.798 for clan, hierarchy, and market indicators, respectively.

Hence, the final research framework of this study will involve variables as follows (Figure 5.8):

- 1) Three cultures, namely clan, hierarchy, and market, as exogenous or antecedent variables;
- 2) The perceived importance and the acceptance of PMS as endogenous of exogenous clan, hierarchy, and market variables, and also as exogenous of the use of PMS variable; and
- 3) The use of PMS as an endogenous of clan, hierarchy, and market cultures, and the perceived importance and the acceptance of PMS.

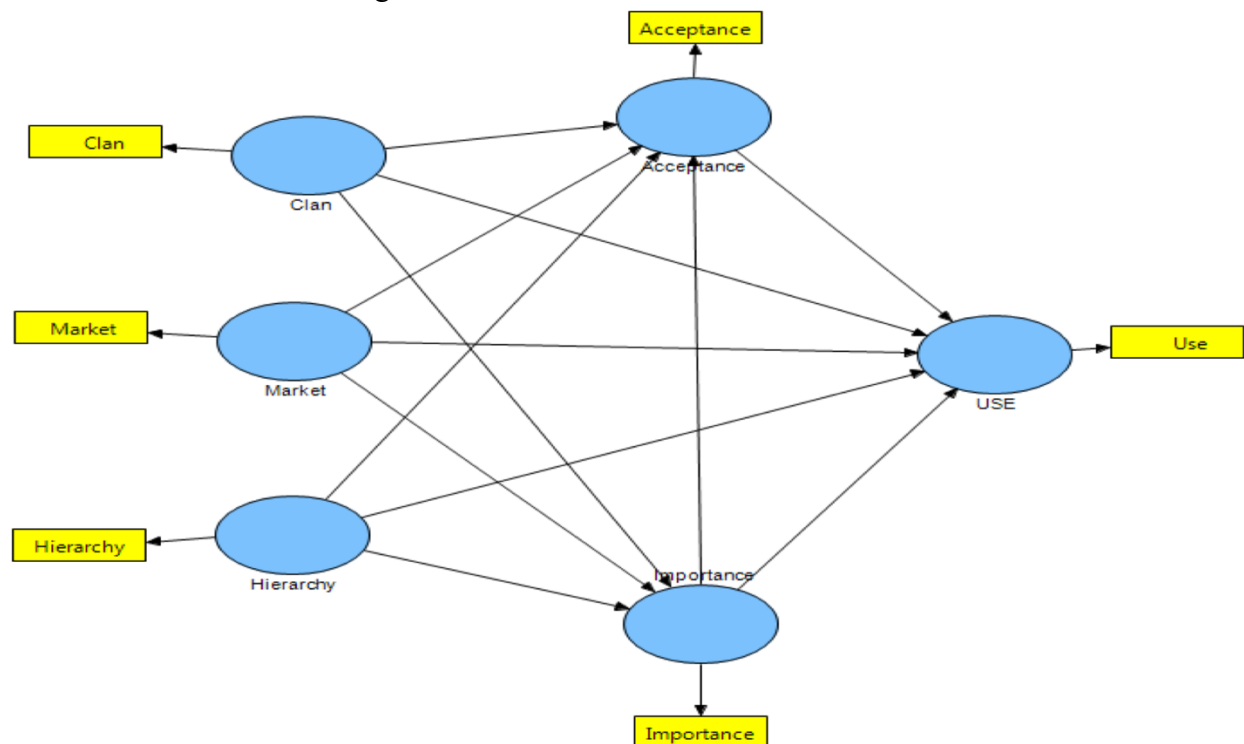
<sup>69</sup> Data source: Appendix 18.

<sup>70</sup> Data source: Appendix 19.

Table 5.21 Remediation of multilinearity issues

Model options and constructs <sup>71</sup>	Culture	Loadings	Options for remedy
<b>Panel A</b>			
<b>Option 1:</b>			
Clan - Hierarchy	Clan	0.933	Two constructs would be eliminated (hierarchy and adhocracy)
	Hierarchy	-0.884	
Adhocracy - Market	Adhocracy	-0.661	
	Market	0.944	
<b>Option 2:</b>			
Clan - Adhocracy	Clan	0.986	One construct would be eliminated (adhocracy)
	Adhocracy	0.151	
Hierarchy - Market	Hierarchy	0.812	
	Market	0.822	
<b>Option 3:</b>			
Clan - Market	Clan	0.932	Two constructs would be eliminated (market and adhocracy)
	Market	-0.884	
Hierarchy - Adhocracy	Hierarchy	0.977	
	Adhocracy	-0.590	
<b>Panel B</b>			
Clan	Clan	1.000	- TOL : clan = 0.356; hierarchy = 0.552; market: 0.556. - VIF : clan = 2.811; hierarchy = 1.810; market = 1.798 - Adhocracy is eliminated (further analysis will employ clan, hierarchy and market as exogenous variables)
Hierarchy - Market	Hierarchy	0.812	
	Market	0.822	

Figure 5.8. Modified research framework



<sup>71</sup> Data source: Appendix 20.

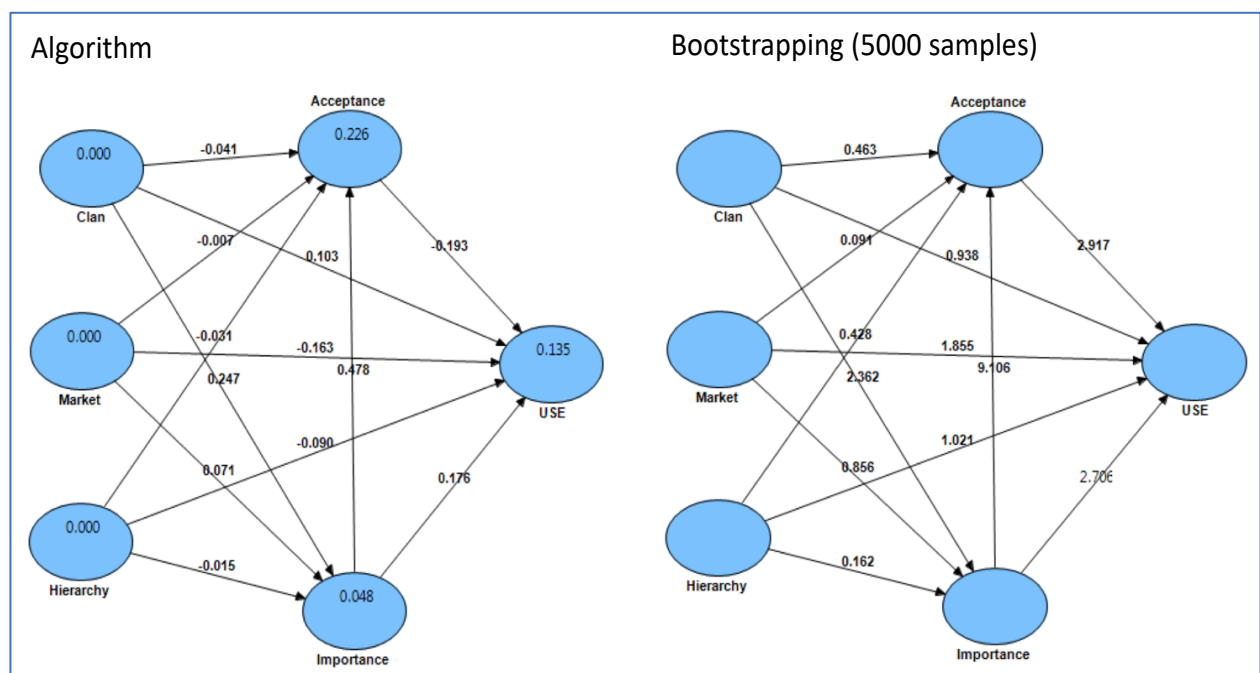
Given the modified research framework above, PLS-SEM analysis were rerun to obtain a new inner model based on repeated indicator approach. In Table 5.22 summary of second stage of repeated indicator model results, it can be noted that the new structural model has passed collinearity issues since all VIFs were below 5 and TOL were also larger than 0.2.

Table 5.22 Summary of second stage of repeated indicator model results<sup>72</sup>

Relationships	Path Coefficients	Standard Error	t statistics	Collinearity statistics		R <sup>2</sup>	Adj. R <sup>2</sup>
				Tol	VIF		
Panel a							
Clan -> Acceptance	-0.041	0.090	0.463	0.348	2.875	0.226	0.212
Hierarchy -> Acceptance	-0.031	0.073	0.428	0.552	1.811		
Market -> Acceptance	-0.007	0.071	0.091	0.555	1.803		
Importance -> Acceptance	0.478	0.053	9.106*	0.952	1.050		
Panel b							
Clan -> Importance	0.247	0.105	2.362*	0.356	2.811	0.048	0.035
Hierarchy -> Importance	-0.015	0.092	0.162	0.552	1.810		
Market -> Importance	0.071	0.083	0.856	0.556	1.798		
Panel c							
Clan -> Use	0.103	0.110	0.938	0.348	2.877	0.135	0.115
Hierarchy -> Use	-0.090	0.088	1.021	0.552	1.812		
Market -> Use	-0.163	0.088	1.855	0.555	1.803		
Acceptance -> Use	-0.193	0.066	2.917*	0.774	1.292		
Importance -> Use	0.176	0.065	2.706*	0.743	1.345		

\* p<0.05

Figure 5.9 Second stage of repeated indicator model (final structural model)



<sup>72</sup> Data source: Appendix 21.

Given the result of second stage analysis as shown in Table 5.22 and Figure 5.9, the relationship of variables can be described as follows:

- 1) The endogenous PMS acceptance is significantly influenced by the perceived importance of PMS ( $\beta = 0.478$ ,  $t$  stats = 9.106,  $p < 0.05$ ), while the three exogenous cultures, i.e. clan ( $\beta = -0.042$ ,  $t$ -stats = 0.463,  $p > 0.05$ ), hierarchy ( $\beta = -0.031$ ,  $t$ -stats = 0.428,  $p > 0.05$ ), and market ( $\beta = -0.007$ ,  $t$ -stats = 0.091,  $p > 0.05$ ), do not significantly influence the PMS acceptance (Table 5.22 Panel a);
- 2) The perceived importance of PMS is significantly influenced by clan culture ( $\beta = 0.247$ ,  $t$ -stats = 2.362,  $p < 0.05$ ), but not significantly influenced by hierarchy culture ( $\beta = -0.015$ ,  $t$  = 0.092,  $p > 0.05$ ), and market culture ( $\beta = 0.071$ ,  $t$  = 0.856,  $p > 0.05$ ) (Table 5.22 Panel b);
- 3) The use of PMS is negatively and significantly influenced by PMS acceptance ( $\beta = -0.193$ ,  $t$ -stats = 2.917,  $p < 0.05$ ), and is positively and significantly PMS importance ( $\beta = 0.176$ ,  $t$  stats = 2.706,  $p < 0.05$ ). The three cultures, i.e. clan ( $\beta = 0.103$ ,  $t$ -stats = 0.938,  $p > 0.05$ ), hierarchy ( $\beta = -0.090$ ,  $t$ -stats = 1.021,  $p > 0.05$ ), and market ( $\beta = -0.163$ ,  $t$ -stats = 1.855,  $p > 0.05$ ), were not significantly influencing the use of PMS (Table 5.22 Panel c); and
- 4) The coefficient determination ( $R^2$ )<sup>73</sup> that measures the model's predictive power (Hair et al., 2017, p. 213) shows that the  $R^2$  of PMS acceptance is 0.236, while the  $R^2$  of PMS perceived importance and PMS use are 0.048 and 0.135, respectively. The results indicate that about 23.6% of changes in PMS acceptance were explained by clan, hierarchy, market cultures, and the perceived importance of PMS (Table 5.22 Panel a). Meanwhile, clan, hierarchy, and market cultures explain about 4.8% of endogen PMS perceived importance (Table 5.22 Panel b). The changes in PMS use were explained about 13.5% by the clan, hierarchy, and market cultures, and also by perceived importance, and PMS acceptance (Table 5.22 Panel c). According to Henseler et al. (2009) and Hair et al. (2017), an  $R^2$  value of 0.75 is considered substantial, an  $R^2$  value of 50 is regarded as moderate, and an  $R^2$  value of 0.26 is considered as weak. Hence, the  $R^2$  of all endogenous in this study are considered weak.

The effect size ( $f^2$ ) that measures the strength of a predictor variable toward its endogenous variable were highlighted in Table 5.23 Panel a: effect size. There were four relationships that have  $f^2$  below 0.02, namely *PMS perceived importance -> PMS actual use*

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<sup>73</sup>  $R^2$  is calculated as the squared correlation between a specific endogenous construct's actual and predicted values (Hair et al., 2017, p. 213)

(0.015), *clan* -> *PMS actual use* (0.013), *market* -> *PMS perceived importance* (0.004), *clan* -> *PMS acceptance* (0.001), *market* -> *PMS acceptance* (0.000). According to (Hair et al., 2017), they were considered to have no effect in the model since their  $f^2$  values are lower than 0.02. The strongest relationship occurred between PMS importance and PMS acceptance with a medium effect (5.8%), and three relationships were considered small, i.e. *clan* -> PMS perceived importance (0.058), *market* -> PMS actual use (0.035), and PMS acceptance -> PMS use (0.025) (Cohen, 1988).

Another parameter according the prediction power is cross-validated redundancy, or  $q^2$  effect sizes. The  $q^2$  quality assesses model's predictive accuracy based on the  $Q^2$  values. According to (Hair et al., 2017), the  $Q^2$  value of certain exogenous variable, or construct, that is greater than 0 indicate that the exogenous constructs have predictive relevance for the endogenous construct. As shown in Table 5.23 Panel b:  $q^2$  effect size, all exogenous variables were relevant in predicting the endogenous variable ( $Q^2$ ). However, most of predictors have no effect on the  $Q^2$  of endogenous variables. Medium effect occurs on the relationship between PMS perceived importance and PMS acceptance. Within culture constructs, only *clan* that has effect with a small effect, whereas PMS acceptance and importance have small effects on the endogenous PMS use.

Table 5.23 Evaluation of effect size ( $f^2$ ) and predictive relevance ( $q^2$ )

Panel a: effect size ( $f^2$ )					
Exogenous -> Endogenous	$R^2_{included}$	Interpretation <sup>74</sup>	$R^2_{excluded}$	Effect size ( $f^2$ )	Interpretation <sup>75</sup>
Clan -> Acceptance	0.2262	Weak	0.2256	0.001	No effect
Clan -> Importance	0.0475	Weak	0.0258	0.023	Small
Clan -> Use	0.1350	Weak	0.1313	0.004	No effect
Hierarchy -> Acceptance	0.2262	Weak	0.2257	0.001	No effect
Hierarchy -> Importance	0.0475	Weak	0.0474	0.000	No effect
Hierarchy -> Use	0.1350	Weak	0.1305	0.005	No effect
Market -> Acceptance	0.2262	Weak	0.2262	0.000	No effect
Market -> Importance	0.0475	Weak	0.0448	0.003	No effect
Market -> Use	0.1350	Weak	0.1202	0.017	No effect
Importance -> Acceptance	0.2262	Weak	0.0085	0.281	Medium
Acceptance -> Use	0.1350	Weak	0.1063	0.033	Small
Importance -> Use	0.1350	Weak	0.1119	0.027	Small

<sup>74</sup> According to Hair et al. (2017, p. 199),  $R^2$  of 0.75, 0.50, or 0.25 for the endogenous construct can be interpreted as substantial, moderate, and weak, respectively.

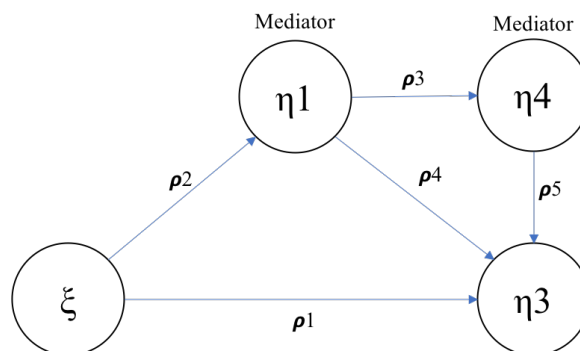
<sup>75</sup> Effect size ( $f^2$ ) impact indicator according to Cohen (1988),  $f^2$  values: 0.35 (large), 0.15 (medium), and 0.02 (small)

Panel b: $Q^2$ and $q^2$ effect size					
Exogenous -> Endogenous	$Q^2_{included}$	Interpretation <sup>76</sup>	$Q^2_{excluded}$	Predictive ( $q^2$ )	Interpretation <sup>77</sup>
Clan -> Acceptance	0.2242	Relevant	0.222	0.003	Small
Clan -> Importance	0.0593	Relevant	0.0593	0.000	No effect
Clan -> Use	0.1041	Relevant	0.1086	-0.005	No effect
Hierarchy -> Acceptance	0.2242	Relevant	0.2254	-0.002	No effect
Hierarchy -> Importance	0.0593	Relevant	0.0519	0.008	No effect
Hierarchy -> Use	0.1041	Relevant	0.1029	0.001	No effect
Market -> Acceptance	0.2242	Relevant	0.2254	-0.002	No effect
Market -> Importance	0.0593	Relevant	0.2229	-0.174	No effect
Market -> Use	0.1041	Relevant	0.0998	0.005	No effect
Importance -> Acceptance	0.2242	Relevant	0.0078	0.279	Medium
Acceptance -> Use	0.1041	Relevant	0.0795	0.027	Small
Importance -> Use	0.1041	Relevant	0.0864	0.020	Small

### 5.9.3 Test of mediation relationship

Mediation relationship is a condition where a third variable intervenes relationship of two related constructs (Hair et al., 2017). Consequently, changes in an exogenous variable may contribute changes in the mediator variable that may changes the endogenous variable in a structural model (Figure 5.10).

Figure 5.10 Mediation relationship



Zhao et al. (2010) classified mediation relationship into (1) indirect only mediation, namely when indirect path coefficient (e.g.  $\rho_2 \times \rho_4$  in Figure 5.10) is significant but direct path coefficient (e.g.  $\rho_1$  in Figure 5.10) is not significant, (2) direct only non-mediation, i.e. when indirect path is not significant ( $\rho_2 \times \rho_4$ ) but direct ( $\rho_1$ ) is significant, (3) no effect non-mediation, namely when neither indirect nor direct is significant, (4) complementary mediation,

<sup>76</sup>  $Q^2$  values larger than 0 indicate that the exogenous constructs have predictive relevance for the endogenous construct under consideration (Hair et al., 2017, p. 203)

<sup>77</sup> Predictive relevance ( $q^2$ ) of predictor exogenous latent variables as according to Henseler et al. (2009),  $q^2$  values: 0.35 (large), 0.15 (medium), and 0.02 (small)

i.e. when both indirect and direct are significant and the result of multiplication of  $\rho_2 \times \rho_2 \times \rho_4$  is positive, and (4) competitive mediation, i.e. when the result multiplication of  $\rho_2 \times \rho_2 \times \rho_4$  is negative. Table 5.24 exhibits the results of mediation analysis among the research variables.

It can be noted from Table 5.24 that only clan culture that has a significant positive indirect effect on the PMS acceptance, whereas none of the other cultures were found have no mediation effects. PMS acceptance competitively mediates the relationship of PMS Perceived importance and PMS use. According to (Zhao et al., 2010), the competitive mediation indicates a situation of incomplete theoretical framework because certain variables were omitted in the direct path and can be a suggestion for future studies.

Table 5.24 Test of mediation effect

Indirect effects' Relationship	Indirect path coefficient	t-stats	direct path coefficient	t-stats	Interpretation
Clan -> acceptance -> use	0.008	0.413	0.103	0.951	Non-mediation
Clan -> importance -> use	0.044	1.805	0.103	0.951	Non-mediation
Clan -> importance -> acceptance	0.118	2.267*	-0.042	0.451	Indirect mediation
Clan -> importance -> acceptance -> use	-0.023	-1.640	0.103	0.951	Non-mediation
Hierarchy -> acceptance -> use	0.006	0.377	-0.090	1.017	Non-mediation
Hierarchy -> importance -> use	-0.003	-0.150	-0.090	1.017	Non-mediation
Hierarchy -> importance -> acceptance	-0.007	-0.158	-0.031	0.416	Non-mediation
Hierarchy -> importance -> acceptance -> use	0.001	0.150	-0.090	1.017	Non-mediation
Market -> acceptance -> use	0.001	0.084	-0.163	1.895	Non-mediation
Market -> importance -> use	0.012	0.789	-0.163	1.895	Non-mediation
Market -> importance -> acceptance	0.034	0.848	-0.007	0.090	Non-mediation
Market -> importance -> acceptance -> use	-0.007	-0.759	-0.163	1.895	Non-mediation
Importance -> acceptance -> use	-0.092	-4.326*	0.176	2.713*	Competitive

- \*p<0.05

## 5.10 Summary

This chapter reports a case study with aimed to diagnose the organizational culture of a hospital and to investigate the relationship between culture and the acceptance, the perceived importance, and the use of current hospital's PMS, i.e. Balanced Scorecard. A study was conducted in MCGH, a local public hospital located in Mataram Indonesia. The study employed a quantitative approach with survey as method. The OCAI/CVF instrument developed by Cameron & Quinn (2011) was employed to diagnose hospital's culture, whereas questionnaire to measure the acceptance, importance and the use of PMS was adopted from Aboajela (2015). The questionnaires were distributed to 226 employees of the hospital.

Results of analysis show that the hospital is placing more emphasis on family culture and efforts while maintaining system stability and order through controls and procedures. compared to the hospital's external focused culture such as competition and innovation. Hierarchy culture is also identified dominant regarding the leadership style.

None of the cultures found significantly influencing the acceptance, the perceived importance and the use of PMS. However, test of mediation effects found that clan has a significant positive indirect effect to the PMS acceptance, indicating that positive effect of clan on PMS acceptance occurs when it fosters PMS perceived importance, whereas negative effect will occur if it does not promote the perceived importance. Further implication of study findings including hypotheses examination will be discussed in the next chapter.



## **Chapter 6**

### **CONCLUSION AND DISCUSSION**

#### **6.1 Introduction**

This study is aimed to review whether BSC is applicable to Indonesian public hospitals and investigate the influence of organizational culture on acceptance, the importance and use in existing Indonesian hospital PMS. Three actions have been taken to reach the goal. First, conducting a literature review of existing experiences of BSC implementation in HICs and non-HICs and then assess the feasibility of BSC application to Indonesian public hospitals. As cultural context plays an important role on the success of BSC adoption, this study also studied various literature on culture and its relevance to organizations' performance, in particular public sector organizations such as hospitals. Second, following suggestion from literature on BSC and organizational culture, this study conducted a culture diagnosis by employing CVF to obtain better understanding on the organizational culture of Indonesian public hospitals. Finally, as a study with a theme in performance management, this study investigated the influence of organizational culture on acceptance, the importance and use of PMS in Indonesian public hospitals.

This chapter will summarize the discussion of the previous chapters and propose the implications to the theory and practice. This chapter begins with a conclusion of findings based on the study objectives described in the first chapter. The second part discusses practical implications and looks at research contributions. The final section discusses limitation and suggestion for future studies.

#### **6.2 Discussion**

##### **6.2.1 Lessons learnt from literatures**

The literature review shows that the implementation of BSC in hospitals within HICs has brought outcomes such as better integration and facilitation of clinical services, healthy financial conditions, stronger employee motivation through job satisfaction, and patient satisfaction. Within non-HICs countries, literatures found that BSC adoption was facing some challenges related to cost effectiveness and sustainability, political and leadership aspects, resource constraints, local culture, education level, and quality of information systems. In this case, a big bang approach<sup>78</sup> in adopting a new system, i.e.

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<sup>78</sup> According to Eason (2005, p. 159), big bang transition is “the strategy of the instant changeover, when everybody associated with the new system moves to the fully functioning new system on a given date.”

BSC, is risky because it “can take longer and make more mistakes (Eason, 2005, p. 160)” since the hospitals are facing improper data management, inadequate human resource capacity, and strong political and bureaucratic influences (El-Jardali et al., 2011; Maharani & Tampubolon, 2017; Rabbani et al., 2007; Rabbani et al., 2011). Rabbani et al. (2007, p. 31) and El-Jardali et al. (2011, p. 360) advocate pilot studies for the use of BSC in low-incomes-countries (LICs) settings. They recommended a cultural readiness at the first step then followed by the design of a sample scorecard for one or two units, gradual scale-up, and evaluation. This approach is also called “a trial and dissemination strategy (Eason, 2005, p. 163),” namely a strategy that usually starts with a small-scale implementation with one department or section, which aimed to test the system that planned to be implemented on a wider basis.

As have been discussed in Chapter 4, review results from official documents relating to the management of Indonesian public hospitals show that BSC had been introduced for a long time to public hospitals’ managers by GOI. The BSC framework is similar to the latest generation of BSC in the way that performance measures are conceptualized as input, output, and outcome. Hence, from government perspective, Indonesian public hospitals’ managers were expected to implement BSC more broadly as a strategy management instead of performance measurement only. However, benefits obtained from the BSC adoption were rated low because the hospital are mostly still financially dependent on government subsidies, and lack of quality and quantity of human resources (Maharani & Tampubolon, 2017).

Given the situation explained above, several interviews with local hospitals’ stakeholders had been conducted. Some issues were revealed as follows; (1) performance management, namely Indonesian public hospitals are governed in a top-down approach<sup>79</sup>, (HF<sup>80</sup>, KH<sup>81</sup>, and IP<sup>82</sup>), (2) Lack of knowledge (KH)<sup>83</sup>, (3) commitment due to

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<sup>79</sup> According to UNDP (2006, p. 5), top-down approach is a change intervention based on the assumption that “if managers plan things properly, change can be executed smoothly. The only obstacle comes from resistance of some employees; hence focus is on changing the culture of an organization or the ‘way we do things around here’.” Indonesian public hospitals are obligated to follow manuals and guidance provided by authorities in reporting their performance. Hospitals’ managers were asked to fill number (figures) in a number of planning and reporting documents’ templates that provided mainly by four institutions (MoH, MoF, MHA and BPKP).

<sup>80</sup> HF is Chairman of Regional Hospital Association/Director of Provincial Public Hospital (PPH).

<sup>81</sup> KH is Head of Finance and Accounting in MCGH.

<sup>82</sup> IP is Head Section of Medical Service in MCGH.

<sup>83</sup> “We don’t have knowledge about the BSC.....we just follow templates made by the ministry and the local government” (KH)

employment status (WD)<sup>84</sup>, (4) limited number of staffs with business education background (ZH)<sup>85</sup>, (5) composition of employees (demographic problem)<sup>86</sup>, (6) political<sup>87</sup> and bureaucratic issues (HF)<sup>88</sup>.

Beer & Nohria (2000, p. 2) argued that change is “difficult to pull off” and “about 70% of change initiatives fail.” However, Indonesian public hospitals can follow the proposed guideline as shown in Figure 6.1. The first phase is conducting an extensive review of international and national best practices on BSC adoption while reviewing the official government documents such as national strategic plan, minimum standard of public services on health, and also the key performance indicators. Reviewing the government documents is a necessary action to be taken since Indonesian health system involves cross governmental functions and entities including MoH, MHA, and local governments, which lead to the need of harmonization of rules and regulations. Second phase is preparing for a BSC framework based on review results (first step). This phase involves some activities such as disseminating the preliminary study results in a meeting with internal and external stakeholders, design of BSC framework and strategy map, selection of measures, etc. This phase is conducted simultaneously with the readiness assessments (Figure 6.2) and cultural assessment with the OCAI instrument could be an option to be employed.

The third phase is training, piloting, and evaluation. Training is aimed to disseminate manuals, guidelines, and procedure of BSC framework. If the BSC is designed by using a software then the training should include the software manuals in training. Piloting is aimed to test the BSC framework that has been developed in the second phase. Pilot approach will answer a question whether BSC design can be fully implemented through evaluation. When the pilot is successful, hospital then can use the pilot results as the basis of further development (Eason, 2005).

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<sup>84</sup> “....high-committed employees indeed a problem. As a civil servant, we are obligated to follow what and how our leader wants, including positioning. Now we are here at the hospital serving for patients, but we can be rotated or promoted to another government office.” (WD, head section of Treasury, Accounting and Verification in MCGH)

<sup>85</sup> “Of hundreds of employees, we only have six staffs with accounting background. Recruitment is not in our decision. It belongs to city government....” (ZH, vice director of MCGH).

<sup>86</sup> “We have unbalance situation. Except for medical staffs, hospital managers and staff are appointed by government. Directors don’t have freedom to determine whom they want to be placed in their units” (HF).

<sup>87</sup> “we are subject of political interest .... different governor different policies” (HF).

<sup>88</sup> “too many reports we have to prepare” (IP).

Figure 6.1 Proposed framework of BSC adoption phases for Indonesian public hospitals

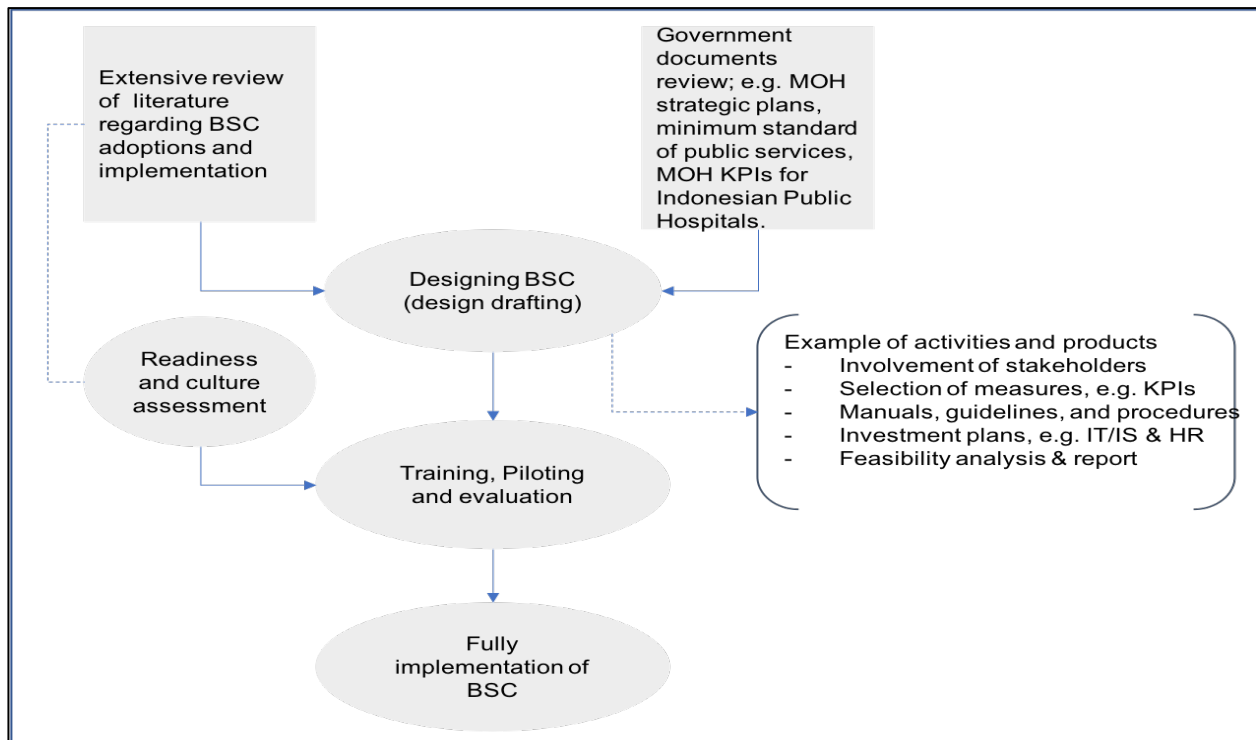


Figure 6.2 Example of readiness assessments

- A. Need Assessment**
1. The hospital has invested in a performance management system/tool but there is no increase in customer results.
  2. No body would notice if the hospital did not produce monthly-based performance reports.
  3. We create significant value from intangible assets such as employee knowledge and innovation, customer relationships, and a strong culture.
  4. We have a strategy (or have had strategies in the past) but have a hard time successfully implementing.
  5. We rarely review our performance measures and make suggestions for new and innovative indicators.
  6. Our senior management team spends the majority of their time together discussing variances from plan and other operational issues.
  7. Budgeting at our organization is very political and based largely on historical trends.
  8. Our employees do not have a solid understanding of our mission, vision, and strategy.
  9. Our employees do not know how their day-to-day actions contribute to the organization's success.
  10. No body owns the performance measurement process at our organization.
  11. We have numerous initiatives taking place at our organization, and it's possible that not all are truly strategic in nature.
  12. There is little accountability in our organization for the things we agree as a group to do.
  13. Employees tend to only focus within their unit service and as a result, we have low level of collaboration performance among departments..
  14. Our employees have difficulty accessing the critical information they need to serve customers.
  15. Priorities at our organization are often dictated by current necessity.
  16. The environment in which we operate is changing, and in order to succeed we too must change.
  17. We face increased pressure from stakeholders to demonstrate results.
  18. We do not have clearly defined performance targets for both financial and nonfinancial indicators.
  19. We cannot clearly articulate our strategy in a one-page document or "map."
  20. We sometimes make decisions that are beneficial in the short-term, but may harm long-term value creation.
- B. Resource availability assessment**
1. Does your facility have a computer network?
  2. Does the senior leadership have computers?
  3. Does the senior leadership have access to the Internet?
  4. Does the senior leadership know how to use a word processing program? (e.g. Word, Word Perfect)
  5. Does the senior leadership know how to use a spreadsheet program? (e.g. Excel)
  6. Does the senior leadership know how to use presentation software? (e.g. PowerPoint)
  7. Do department managers have computers?
  8. Do department managers have access to the Internet?
  9. Do department managers know how to use a word processing program? (e.g. Word, Word Perfect)
  10. Do department managers know how to use a spreadsheet program? (e.g. Excel)
  11. Do department managers know how to use presentation software? (e.g. PowerPoint)
  12. Can your facility afford to hire a consultant?
  13. Can your facility afford the cost of benchmarking data?

Source: adopted from Niven (2008, p. 67)

### **6.2.2 Results of hospital cultures diagnosis**

The results of hospital culture diagnosis show that clan and hierarchy are two cultures with highest scores in the studied hospital. Clan culture indicates that hospital's business is run by focusing on employees and is operated like an extended family with common goals and shared values. Flexibility, employee autonomy, and teamwork are valued rather higher than competition or conformity (Cameron & Quinn, 2011). Although there were still very limited number of studies that have been conducted regarding Indonesian healthcare organization's culture using CVF's typology, this finding supports the studies conducted by Irviranty (2018) and Indrawati & Dwilaksono (2007), but differs from studies that were conducted by Magdalena et al. (2017), Widyanti & Agtriani (2017), and Wijayani et al. (2014), who reported hierarchy type as the dominant organization culture.

Given the results of hospital culture diagnosis (see Figures 5.5), it can be concluded that the hospital under study emphasized the internal values (clan and hierarchy) more than the values referring to the external focus (adhocracy and market). In addition, there is no statistically difference between mean values of clan and hierarchy cultures but these two internal cultures were found statistically difference to adhocracy and market (see Table 5.9). These findings indicate that the hospital is placing more emphasis on family culture and efforts to maintain system stability and order with existing controls and procedures, compared to the hospital's external focused culture such as competition and innovation.

The study findings did not support findings of Rabbani et al. (2010), Acar & Acar (2014), Adams et al. (2017), Aboajela (2015), and Sasaki et al. (2017) who found hierarchy as hospital's dominant culture in Pakistan, Turkey, Libya, Australia, and Japan, respectively. However, The results support Eker & Eker's (2009) findings who found flexible cultures were more emphasized in Turkish manufacturing sector.

Within OCAI's six dimensions, clan was found has the highest mean compared to other types of cultures in five dimensions, i.e. dominant characteristics, management of employee, organizational glue, strategic emphasis, and criteria of success dimensions. Meanwhile, hierarchical culture has the highest mean in leadership dimension (see Table 5.10). This findings confirmed that the hospital is still influenced by its status as a part of the local government entity which generally found hierarchical (Cameron & Quinn, 2011,

p. 38). The findings also show incongruence is occurred among the hospital cultures (Cameron & Quinn, 2011, p. 84).

Figure 6.3 Hospital Culture profiles

<b>The Clan Culture (27.89)</b>	<b>The Adhocracy Culture (23.44)</b>
<ul style="list-style-type: none"> <li>✓ A very friendly place to work where people share a lot of themselves. It is like an extended family.</li> <li>✓ The leaders, or head of the organization, are considered to be mentors and, maybe even, parent figures.</li> <li>✓ The organization is held together by loyalty or tradition. Commitment is high.</li> <li>✓ The organization emphasizes the long-term benefit of human resource development and attaches great importance to cohesion and morale.</li> <li>✓ Success is defined in terms of sensitivity to customers and concern for people.</li> <li>✓ The organization places a premium on teamwork, participation, and consensus.</li> </ul>	<ul style="list-style-type: none"> <li>✓ A dynamic, entrepreneurial, and creative place to work. People stick their necks out and take risks.</li> <li>✓ The leaders are considered to be innovators and risk takers.</li> <li>✓ The glue that holds the organization together is commitment to experimentation and innovation.</li> <li>✓ The emphasis is on being on the leading edge. The organization's long-term emphasis is on growth and acquiring new resources.</li> <li>✓ Success means gaining unique and new products or services. Being a product or service leader is important.</li> <li>✓ The organization encourages individual initiative and freedom.</li> </ul>
<b>The Hierarchy Culture (26.06)</b>	<b>The Market Culture (22.62)</b>
<ul style="list-style-type: none"> <li>✓ A very formalized and structured place to work. Procedures govern what people do.</li> <li>✓ The leaders pride themselves on being good coordinators and organizers, who are efficiency-minded. Maintaining a smoothly running organization is most critical.</li> <li>✓ Formal rules and policies hold the organization together.</li> <li>✓ The long-term concern is on stability and performance with efficient, smooth operations.</li> <li>✓ Success is defined in terms of dependable delivery, smooth scheduling, and low cost.</li> <li>✓ The management of employees is concerned with secure employment and predictability.</li> </ul>	<ul style="list-style-type: none"> <li>✓ A results-oriented organization. The major concern is getting the job done. People are competitive and goal oriented.</li> <li>✓ The leaders are hard drivers, producers, and competitors. They are tough and demanding.</li> <li>✓ The glue that holds the organization together is an emphasis on winning. Reputation and success are common concerns.</li> <li>✓ The long- term focus is on competitive actions and achievement of measurable goals and targets.</li> <li>✓ Success is defined in terms of market share and penetration. Competitive pricing and market leadership are important.</li> <li>✓ The organizational style is hard-driving competitiveness.</li> </ul>

Source: adapted from Cameron & Quinn (2011, p. 249)

Incongruence in organizational culture leads to discomfort and, consequently, is followed frequently by complaints from organization members (Cameron & Quinn, 2011, p. 85). It can cause ambiguous situation and lack of integrity from employees as they feel that the hospital business is not run by perceived values. Incongruence also causes differences in perspectives, goals, and strategies. Therefore, it is recommended that culture within the dimensions should be aligned to achieve high effectiveness. Cameron & Quinn (2011, p. 125) suggested “Means–Does Not Mean” analysis to solve the cultures incongruence (Figure 6.4). In the case of this study findings, it is suggested that hospital should be more decentralized in decision making by encouraging sub-ordinates managers and employees’ participation and involvement.

Figure 6.4 “Means–Does Not Mean” Analysis

<b>Clan Culture increase means</b> <ul style="list-style-type: none"> <li>- More employee empowerment</li> <li>- More participation and involvement</li> <li>- More cross-functional teamwork</li> <li>- More horizontal communication</li> <li>- A more caring climate</li> <li>- More recognition for employees</li> </ul>	<b>Adhocracy Culture increase means:</b> <ul style="list-style-type: none"> <li>- More employee suggestions</li> <li>- More process innovativeness</li> <li>- More thoughtful risk taking</li> <li>- Tolerance of first-time mistakes</li> <li>- More listening to customers</li> </ul>
<b>Clan Culture increase does not mean:</b> <ul style="list-style-type: none"> <li>- A culture of “niceness”</li> <li>- Lack of standards and rigor</li> <li>- An absence of tough decisions</li> <li>- Slacking off</li> <li>- Tolerance of mediocrity</li> </ul>	<b>Adhocracy Culture increase does not mean:</b> <ul style="list-style-type: none"> <li>- Everyone for himself or herself</li> <li>- Covering up errors</li> <li>- Thoughtless risk taking</li> <li>- Taking our eye off the ball</li> <li>- Spending money on the latest fad</li> <li>- No coordination and sharing ideas</li> </ul>
<b>Hierarchy Culture decrease means:</b> <ul style="list-style-type: none"> <li>- Fewer sign-offs for decisions</li> <li>- More decentralized decisions</li> <li>- Fewer roadblocks and less red tape</li> <li>- Less micromanagement</li> <li>- Trying out more crazy ideas</li> <li>- Eliminating paperwork</li> </ul>	<b>Market culture decrease means:</b> <ul style="list-style-type: none"> <li>- Ongoing commitment to excellence</li> <li>- A world-class organization</li> <li>- Goal accomplishment</li> <li>- Energized employees</li> <li>- Less myopic thinking about targets</li> <li>- A less punishing environment</li> </ul>
<b>Hierarchy Culture decrease does not mean:</b> <ul style="list-style-type: none"> <li>- Lack of measurement</li> <li>- Not holding people accountable</li> <li>- Not following the rules</li> <li>- Not monitoring performance</li> <li>- A non-orientation toward change</li> </ul>	<b>Market Culture decrease does not mean:</b> <ul style="list-style-type: none"> <li>- Less pressure for performance</li> <li>- Ceasing to listen to customers</li> <li>- Less satisfied customers</li> <li>- Missing deadlines</li> <li>- Lower quality standards</li> <li>- Loss competitiveness</li> </ul>

Source: adapted from Cameron & Quinn (2011, p. 125)

### 6.2.3 Relationship of organizational culture to the acceptance, the perceived importance, and the use of BSC as the hospital’s PMS

The results of PLS-SEM analysis revealed that clan culture is significantly and positively related to the perceived importance of PMS (see Table 5.22). Clan culture is also found positively but not significantly related to the use of PMS and negatively related to acceptance of PMS. Hence, the first hypothesis (H1) of the study not supported, the second (H2) and the third hypotheses (H3) are supported (Table 6.1). Meanwhile, hypotheses related to adhocracy culture (H4, H5, and H6) were dropped from the analysis due to multicollinearity issues.

Hierarchy culture has been found negatively but not significantly related to the acceptance, the perceived importance, and the use of hospital’s PMS. Meanwhile, market culture is found negatively but not significantly related to the acceptance and use of PMS, but positively and insignificantly related to the perceived importance of PMS. Hence, the H7, H8, H9, and H10 hypotheses of this study are supported while the H11 and H12 are not supported (Table 6.1).

Table 6.1 Results of hypotheses examination on the relationship between cultures and the acceptance, importance, and the use of PMS

Hypotheses	Expected Sign	Resulted Sign	Supported/Not supported	Significant/Not significant ( $\alpha = 5\%$ )
H1 : Clan -> PMS acceptance	+	-	Not supported	Not significant
H2 : Clan -> PMS use	+	+	Supported	Not significant
H3 : Clan -> PMS perceived importance	+	+	Supported	Significant
H4 : adhocracy -> PMS Acceptance	+	n.a	<i>Dropped due to multicollinearity issues</i>	
H5 : adhocracy -> PMS use	+	n.a	<i>Dropped due to multicollinearity issues</i>	
H6 : adhocracy -> PMS perceived importance.	+	n.a	<i>Dropped due to multicollinearity issues</i>	
H7 : Hierarchy -> PMS acceptance	-	-	Supported	Not significant
H8 : hierarchy -> PMS use	-	-	Supported	Not significant
H9 : Hierarchy -> PMS perceived importance	-	-	Supported	Not significant
H10 : Market -> PMS perceived importance	+	+	Supported	Not significant
H11 : Market -> PMS acceptance	+	-	Not supported	Not significant
H12 : Market -> PMS use	+	-	Not supported	Not significant

Based on results of the path coefficient and coefficient of determinant ( $r^2$ ) analysis as exhibited in Table 5.22, and the effect size values ( $f^2$ ) and the predictive relevance ( $Q^2$  and  $q^2$ ) as exhibited in Table 5.23, it can be concluded that clan culture is the most relevant among the cultures in the model. First, clan culture significantly and positively influences the acceptance and the perceived importance of hospital's PMS (clan's path coefficient and  $r^2$ ), while other are not. Second, although the three cultures are found same weak but relevant as predictors of the acceptance, the perceived importance, and the use of hospital's PMS, clan culture is the only culture that has effect on the predictive power ( $r^2$ ) and predictive relevance ( $Q^2$ ) as shown in table 5.23. Finally, clan culture is found positively and significantly mediating the relationship between the perceived importance and the acceptance of hospital's PMS (see Table 5.24). This significant indirect mediation implies the positive effect of clan on PMS acceptance occurs when it fosters PMS perceived importance, whereas negative effect will occur if clan does not promote the perceived importance.

#### 6.2.4 Relationship of the acceptance, the perceived importance, and the use of BSC as the hospital's PMS

The results of PLS-SEM analysis revealed that relationships among the acceptance, importance and the use of PMS variables are significant (see Table 5.22). The perceived importance is found significantly and positively influencing the acceptance and the use



of PMS while PMS acceptance is found significantly but negatively influencing the use of PMS. Hence the H13 and H14 hypotheses are supported while the H15 hypothesis is not supported (Table 6.2).

Perceived importance of PMS has stronger effect on PMS acceptance compared to its effect on the PMS use (see Table 5.23 Panel a). The effect relationship is also stronger when compared to the effect of PMS acceptance on the PMS use. Both PMS perceived importance and PMS acceptance are relevant as the predictors of the use of PMS (see Table 5.23 Panel b).

PMS culture significantly and positively influences the acceptance and the perceived importance of hospital's PMS (clan's path coefficient and  $r^2$ ), while other are not. Second, although the three cultures are found same weak but relevant as predictors of the acceptance, the perceived importance, and the use of hospital's PMS, clan culture is the only culture that has effect on the predictive power ( $r^2$ ) and predictive relevance ( $Q^2$ ) as shown in table 5.23. Finally, clan culture is found positively and significantly mediating the relationship between the perceived importance and the acceptance of hospital's PMS (see Table 5.24). This significant indirect mediation implies the positive effect of clan on PMS acceptance occurs when it fosters PMS perceived importance, whereas negative effect will occur if clan does not promote the perceived importance. PMS acceptance is competitively mediating the relationship of PMS Perceived importance and PMS use. The competitive mediation indicates that the study framework is incomplete because certain variables were not included in the analysis. Exploration of new variables to be added in the model is suggested for future researchers (see Table 5.24).

Table 6.2 Results of hypotheses examination on the relationship between the acceptance, the perceived importance and the use of PMS

Hypotheses	Expected Sign	Resulted Sign	Supported/Not supported	Significant/Not significant ( $\alpha = 5\%$ )
H13 : PMS perceived importance -> PMS use	+	+	Supported	Significant
H14 : PMS perceived importance -> PMS acceptance	+	+	Supported	Significant
H15 : PMS acceptance -> PMS use	+	-	Not supported	Significant

Given the result analysis of PMS perceived importance influences on the use of PMS and its acceptance, this study reinforces the relevancy of acceptance system theories such as TPB (Ajzen, 1985), TRA (Fishbein & Ajzen, 1975), TAM (Davis, 1989), UTAUT (Venkatesh et al., 2003), and DeLone-McLean (DeLone & McLean, 1992), that end-users' behavior toward certain information system is stimulated by their perception (Table 6.2). BSC framework is a popular 'scientific'<sup>89</sup> and sophisticated business monitoring tool, and its financial and non-financial dimensions of measures have succeeded in convincing the hospital's stakeholders in balancing their perspectives regarding performances to be considered for better economic and social outcomes (Tian Gao & Gurd, 2015).

A negative relationship between PMS acceptance and its actual use (Table 6.2) becomes an unexpected finding of this research. This relationship, according to the result of mediation effect analysis (Table 5.1), also has a competitive mediation which indicates that the relationship needs to be considered in future studies (Zhao et al., 2010). To this study, the negative relationship might be explained as a consequence of being a half-public, or quasi-public, entity. The hospitals indeed have obtained their flexibilities according to the laws (the jure), e.g. in relating to the personnel management, debt issuance, and purchasing, however, details of its implementation are not clear yet (the facto). Our interview results show that the hospital management is still complaining for being a subject for some external institutions that come with different demands relating to reporting responsibilities. The Ministry of Health, for example, has a set of performance standards that are different from the Ministry of Administrative and Bureaucratic Reform. Likewise, the two ministries will be different from the standards demanded by the local government's inspectorate as an internal auditor institution. The differences must be accommodated eventually by the hospital and, hence, cause ambiguous situation that lead the hospital to inconsistencies between the intention and the actual use of performance measures. This study proposes a harmonization of performance standards to solve the problem and to extend study findings by Maharani & Tampubolon (2016) in which they recommended that those corporatized hospital should put more emphasis on a well-designed planning process, improvement of managers' capabilities, and regular monitoring (see Sub section 6.2.1).

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<sup>89</sup> Tian Gao & Gurd (2015) mentioned 'scientific' to show that BSC as a system is technically useful for monitoring the hospitals' operations in a systematic method.

### **6.2.5 Other important findings: the perceived importance versus the use of hospital's PMS**

This study investigated the perceived importance and the use of hospital's PMS by using questionnaires that involve similar indicators in the two variables, namely financial, customer, innovation, employee, quality, and community. The result of nonparametric statistical mean difference test shows that the two variables were significantly difference (see Table 5.14 Panel b). The pairwise comparison between variables' indicators also revealed significant differences except for community indicator. The results suggested that although hospital is already following the framework proposed by Kaplan & Norton (2001, p. 155) in which customer should be prioritized in a not-for-profit BSC framework (see Table 5.14 Panel b), however, hospital is suggested to minimize the different views of hospital employees between the perceived importance and the use of financial, customer, innovation, employee, and quality measures. Aligning the employee perception on the importance and the usage of PMS indicators is necessary since perceived importance is cognitively will enhance the PMS acceptance and use as postulated by acceptance model's theories such as Ajzen's TPB (1985), Fishbein & Ajzen's TRA (1975), Davis's TAM (1989), Venkatesh's UTAUT (2003), and DeLone-McLean (1992).

## **6.3 Conclusion**

As a performance measurement system for hospitals, BSC is a promising tool for providing a balanced and holistic view of the organization's performance (Tian Gao & Gurd, 2015), broadening the organization's focus to be considered by stakeholders (Jeffs et al., 2011; Radnor & Lovell, 2003), and making the organization more forward-looking (Groene et al., 2009; Jones et al., 2002). However, to gain benefits for its use, the original version of is too general and need to be modified to fit the organizations' culture BSC (Abdel-Kader et al., 2011; Haldma & Lääts, 2012). A high rate of BSC adoption in US, for example, is strongly influenced by the fact that US corporate cultures are compatible to BSC concept, (Kaplan & Norton, 1993), but for the use in different countries, it is suggested to consider cultural context of organization (Armenakis & Bedeian, 1999; El-Jardali et al., 2011; Rabbani et al., 2010).

The first objective of this research, results of literatures' review revealed that BSC is applicable to be implemented in Indonesian public hospitals and have a chance to be successful under certain condition (see sub-section 6.2.1). First, the design of BSC framework should be a result of harmonization of international best practice and government rules and regulation.

Second, the implementation should be design in gradual, or trial and dissemination, transition strategy. Finally, readiness and cultural assessment should be a conducted fit the BSC framework to cultural and contextual context.

The second objective of this research revealed that the surveyed hospital is emphasizing on clan and hierarchy cultures rather than adhocracy and market cultures. Meaning that the hospital has a culture that characterized by a very friendly workplace with participation, openness, high commitment, and loyalty as organization's glue, while maintaining system stability through controls and procedures (see Sub section 6.2.2).

This third objective of this research revealed that clan culture is the most relevant in predicting the acceptance and the perceived importance of hospital's PMS. Clan culture is found as a significant antecedent variable of PMS acceptance and PMS perceived importance relationship (see Sub section 6.2.3). Significance relationships among the acceptance, the perceived importance, and the use of PMS revealed that the utilization of PMS is stimulated by their perception (see Sub section 6.2.4).

To summarize, the use and the acceptance of a multiple-based dimensions of PMS such as BSC is clearly determined by perception and cognition of its users. Furthermore, in order to enhance the PMS use and perceived importance, and also its acceptance, the hospital should pay attention to its cultures since they can be an enabler or barrier for the PMS's effectiveness. Specifically, the studied hospital needs to make its hierarchical leadership culture congruent to the group, or clan, culture that characterized by delegation of decision-making process, and encourages hospital's directors and managers to act as employee mentors rather than as coordinator and organizer. That is to say that regarding the current PMS used by the hospital, a flexible-internal culture, i.e. clan, is a must to enable the PMS to work well.

## **6.4 Contribution of research**

### **6.4.1 Theoretical contributions**

Research on the relationship between hospital cultures and performance measurement systems to date has been very limited for developing countries. None of studies have been conducted in Indonesia setting. This study has generally contributed to the literature on management accounting in general and to the performance measurement systems gap in particular. Firstly, this study attempts to fill the gap by diagnosing hospital cultures, and also investigating the influence of different types of cultures to the acceptance, the perceived important, and use of BSC which have been either ignored and blended with other variables in previous studies. Secondly, this study reinforced the

relevancy of contingency approach and acceptance model theories by employing them in Indonesian public hospital setting. Finally, this study is perhaps the first to study the relationship between hospital cultures and the acceptance, the importance, and the use of BSC. All contributions, or the study findings could be important inputs in designing a BSC framework for Indonesian public hospitals.

#### **6.4.2 Practical Contributions**

This research was conducted in a public hospital in Indonesia that has different contextual cultures from the HICs where BSC has been mostly reported successfully implemented. Findings from this study will be useful in adapting BSC frameworks from the HICs. Furthermore, this study investigated financial and non-financial performance measures that can be applied in hospitals, and perhaps the most recent to investigate the organizational culture and its relationship with the BSC adoption so that it contributes to the most contemporary insight into which cultural values are fits for hospitals. Hence, the study the findings could be used for designing a BSC framework to be implemented in Indonesian public hospitals.

### **6.5 Limitations and future research**

#### **6.5.1 Limitations**

This study has limitations as follows; first, this study is conducted in one local public hospital located in a small city (Mataram), in a small island (Lombok island), and in one of 10 local governments within West Nusa Tenggara Province. Moreover, Indonesia consists of 34 provinces and 416 districts and cities, also has thousands of islands with thousands of different tribes and unique values. All the respondents were from this hospital. Consequently, the results cannot be generalized to other districts within province, islands and tribes within the country, and also within countries that have different social, political and economic environments may generate other results.

Second, the scarcity of similar studies in Indonesia that cause the results are difficult to be generalized, therefore, the findings of this study invite other researchers to extend the research framework employed in this study. Finally, this study has limitations as the researcher did not control of any potentially confounding variables, such as age, experience, education, gender, etc.

### **6.5.2 Recommendations for future research**

Considering the above limitations, more research on BSC in the hospital sectors, Indonesian public hospitals in particular, are needed with the suggestions as follows; first, as this study is only focused in one local public hospital, it is recommended that future research should involve other public hospitals to obtain a generalizable finding. Second, there are some types of Indonesian hospitals including private and public, local and national, and so on. It is desirable for future research to extend the number of the hospitals surveyed so that a comparative analysis can be conducted and a deeper understanding of contextual aspects of PMS can be obtained. Finally, it is suggested for future research to investigate partially the perspectives in BSC framework in order to obtain a better understanding of contextual factors relationship to the perspectives.

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Mataram, May 2017

Dear Participant

I am a doctoral student at The Graduate School of Economics and Management, Tohoku University, Japan, currently preparing my doctoral project with theme,

**THE INFLUENCE OF ORGANIZATIONAL CULTURE ON THE USE OF PERFORMANCE  
MEASUREMENT SYSTEMS**

**A Case Study from Selected Public Hospitals in Mataram City, Indonesia**

This research aims to explore and investigate the dominant type of organizational culture on the acceptance of financial, non-financial performance measurement systems, and their impact on organizations performance. The final results of this study will be available to all those who participated in the study upon request.

This questionnaire is aimed at decision makers who are using financial and non-financial performance measurement system in their organizations. Your assistance in completing the attached questionnaire would be greatly appreciated. Please remember that it is important to complete the survey according to the instructions provided for each part.

I would like to reassure you that your response will be treated as strictly confidential and will only be used for the purposes of this research. It will not be disclosed to third parties under any circumstances Should you need further information or clarification regarding this research study, please do not hesitate to contact me or my main supervisor at the addresses below.

Thank you for your co-operation in completing this questionnaire.

Yours sincerely

SAIPUL ARNI MUHSYAF

<b>SAIPUL ARNI MUHSYAF</b> Doctoral Student The Graduate School of Economics and Management, Tohoku University, Japan 27-1 Kawauchi, Aoba-ku, Sendai 980-8576, Japan. Tel: +81227956261. Fax: +81227956267. Mobile: +6281805758666 Email: saipul.am@gmail.com, or saipulam@student.tohoku.ac.jp	<b>Prof. Masaaki Aoki, PhD</b> Professor in Accounting (Supervisor) The Graduate School of Economics and Management Tohoku University, Japan 27-1 Kawauchi, Aoba-ku, Sendai 980-8576, Japan. Tel: +81227956261. Fax: +81227956267. Mobile: +819033691657 Email: maoki@econ.tohoku.ac.jp
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## A - General Information about Your Self

For questions A1 to A3 below please tick (✓) relevant answers to indicate:

### A1

Job title/position
<input type="checkbox"/> Director
<input type="checkbox"/> Vice Director
<input type="checkbox"/> Chief of Finance Department /Assistant/ Vice
<input type="checkbox"/> Chief of Administrative Department /Assistant/ Vice
<input type="checkbox"/> Financial Controller
<input type="checkbox"/> Other ( <i>please specify</i> ) .....

### A2

Experience	Less than one year	1-5 years	6-10 years	More than 10 years
In the current job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With the current organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### A3

Qualification
<input type="checkbox"/> Diploma (D1/D2/D3)
<input type="checkbox"/> Bachelor's degree (D4/S1)
<input type="checkbox"/> Post-graduate (e.g. MM, M.Si, M.Ep, MT, MKes, M.Ak, MSc., MBA, Dr, Ph.D)
<input type="checkbox"/> Professional qualification (e.g , accountant, Specialist, please specify)
.....
<input type="checkbox"/> Other (Please specify)
.....

## B - General Information about your organization

Hospital's age	
<input type="checkbox"/> Less than 5 years	<input type="checkbox"/> 5- Less than 11 years
<input type="checkbox"/> 11-20 years	<input type="checkbox"/> More than 20 years

Hospital's level/type	
Local/Municipal hospital	<input type="checkbox"/>
Regional/Province hospital	<input type="checkbox"/>
Specialized hospital	<input type="checkbox"/>

Hospital's class/type	
Type A	<input type="checkbox"/>
Type B	<input type="checkbox"/>
Type C	<input type="checkbox"/>

## C - Organizational Culture

In this section we are going to characterize your organization's culture. This part consists of 6 questions that you are asked to rate your organization. Each question has four alternatives, which refer to four types of culture. Divide 100 points among the four alternatives depending on the extent to which each alternative fit to your own organization. Give a higher number of points to the alternative that is most fit to your organization.

For example, in question 1, if you think alternative A is very similar to your organization, alternative B and C are somewhat similar, and alternative D is hardly similar at all, you might give 50 points to A, 25 point to B and 20 points C, and give 5 points to D. Be sure that your total equals 100 for each question.

These responses mean that you are rating your organization as it is currently.

1.	Dominant Characteristics	Score
A.	The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.	
B.	The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	
C.	The organization is very results oriented. A major concern is with getting	

<b>1.</b>	<b>Dominant Characteristics</b>	<b>Score</b>
	the job done. People are very competitive and achievement oriented.	
D.	The organization is very controlled and structured place. Formal procedures generally govern what people do.	
	<b>TOTAL</b>	

<b>2.</b>	<b>Organizational Leadership</b>	<b>Score</b>
A.	The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.	
B.	The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.	
C.	The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	
D.	The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	
	<b>TOTAL</b>	

<b>3.</b>	<b>Management of Employees</b>	<b>Score</b>
A.	The management style in the organization is characterized by teamwork, Consensus and participation.	
B.	The management style in the organization is characterized by individual risk-taking, innovation, freedom and uniqueness.	
C.	The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.	
D.	The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.	
	<b>TOTAL</b>	



<b>4.</b>	<b>Organization Glue</b>	<b>Score</b>
A.	The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.	
B.	The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being at the cutting edge.	
C.	The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.	
D.	The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.	
	<b>TOTAL</b>	

<b>5.</b>	<b>Strategic Emphases</b>	<b>Score</b>
A.	The organization emphasizes human development. High trust, openness, and participation persist.	
B.	The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	
C.	The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	
D.	The organization emphasizes permanence and stability. Efficiency, control and smooth operations are important.	
	<b>TOTAL</b>	

<b>6.</b>	<b>Criteria of Success</b>	<b>Score</b>
A.	The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	

B.	The organization defines success on the basis of it is a product leader and innovator.	
C.	The organization defines success on the basis of the winning in the market place and outpacing the competition. Competitive market leadership is key.	
D.	The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.	
	<b>TOTAL</b>	

#### **D – Financial and non-financial performance measurement system acceptance**

Please answer the items below by circling the number from the scale below. Please circle the chosen number clearly and if you want to correct your answer, erase the wrong answer carefully first.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

D1	Using financial performance measurement systems in my job would enable me to evaluate organizational performance.	1	2	3	4	5
D2	Using non-financial performance measurement systems in my job would enable me to evaluate organizational performance.	1	2	3	4	5
D3	Using advanced techniques of performance measurement systems (e.g. balanced scorecard) in my job would enable me to evaluate organizational performance.	1	2	3	4	5
D4	Using performance measurement systems (e.g. balanced scorecard) would enhance my effectiveness on the job.	1	2	3	4	5
D5	I would find performance measurement systems (e.g. balanced scorecard) useful in my job.	1	2	3	4	5

## E – The performance measurement system within your organization Unit

### Part 1.

For each of the categories listed below, please indicate the importance of performance indicators falling within each category as drivers of the long-term success of your organization. Using the scale below, please circle the chosen number clearly and if you want to correct your answer, erase the wrong answer carefully first.

5	4	3	2	1
Extremely important	Important	Moderate importance	Not important	Not at all important

	Performance categories	Level of importance				
E1	Financial (e.g. annual earnings, return on assets, cost reduction, general administrative expenditures per patient, etc.)	1	2	3	4	5
E2	Customer (patient), (e.g. customer/patient satisfaction, customer retention, etc.)	1	2	3	4	5
E3	Innovation (e.g. courses or educational programs)	1	2	3	4	5
E4	Employee (e.g. employee satisfaction, workforce capabilities, etc.)	1	2	3	4	5
E5	Quality (e.g. hospital quality awards, etc.)	1	2	3	4	5
E6	Community (e.g. public image, community involvement, etc.)	1	2	3	4	5

### Part 2:

For each of the categories listed below, please indicate the extent to which relevant indicators within each category are used to evaluate performance. Using the scales below, please circle the chosen number clearly and if you want to correct your answer, erase the wrong answer carefully first.

1	2	3	4	5
Not used at all	Slightly used	Moderately used	Significantly used	Highly used

	Performance categories	Level of Usage				
E1	Financial (e.g. annual earnings, return on assets, cost reduction, general administrative expenditures per patient, etc.)	1	2	3	4	5
E2	Customer (patient), (e.g. customer/patient satisfaction, customer retention, etc.)	1	2	3	4	5
E3	Innovation (e.g. courses or educational programs)	1	2	3	4	5
E4	Employee (e.g. employee satisfaction, workforce capabilities, etc.)	1	2	3	4	5
E5	Quality (e.g. hospital quality awards, etc.)	1	2	3	4	5
E6	Community (e.g. public image, community involvement, etc.)	1	2	3	4	5

Mataram, Mei 2017

Yth. Bapak/Ibu/Saudara/i,

Dengan hormat,

Saya, Saipul Arni Muhsyaf, mahasiswa program doctoral dari *The Graduate School of Economics and Management, Tohoku University, Jepang*, saat ini sedang mempersiapkan salah satu project riset dengan tema:

**PENGARUH BUDAYA ORGANISASI TERHADAP SISTEM PENGUKURAN KINERJA  
(STUDI KASUS PADA BEBERAPA RUMAH SAKIT UMUM DAERAH DI INDONESIA)**

Penelitian ini bertujuan mengeksplorasi dan menginvestigasi tipe budaya organisasi yang dominan terhadap penerimaan sistem pengukuran kinerja keuangan dan non-keuangan, dan dampaknya terhadap kinerja organisasi. Hasil akhir dari penelitian ini akan diberikan (disediakan) bagi siapa saja yang berpartisipasi dalam penelitian ini jika diminta.

Kuisisioner ini ditujukan bagi para pengambil keputusan yang menggunakan sistem pengukuran kinerja baik itu kinerja keuangan maupun non-keuangan. Bantuan anda dalam melengkapi kuisisioner terlampir akan sangat berharga bagi kami. Kami juga ingin meyakinkan anda kembali bahwa respon anda terhadap kuisisioner ini akan diperlakukan sangat rahasia dan hanya akan dipergunakan untuk penelitian ini. Jawaban anda tidak akan dibuka untuk pihak lain dan dalam kondisi apapun. Jika anda membutuhkan informasi atau klarifikasi lebih lanjut terkait penelitian ini, dapat menghubungi kami atau supervisor kami pada alamat tertera di bawah.

Terima kasih atas kerjasamanya dalam mengisi/melengkapi kuisisioner ini.

Salam hormat kami,

SAIPUL ARNI MUHSYAF

<b>SAIPUL ARNI MUHSYAF</b> Doctoral Student The Graduate School of Economics and Management, Tohoku University, Japan 27-1 Kawauchi, Aoba-ku, Sendai 980-8576, Japan. Tel: +81227956261. Fax: +81227956267. Mobile: +6281805758666 Email: saipul.am@gmail.com, or saipulam@student.tohoku.ac.jp	<b>Prof. Masaaki Aoki, PhD</b> Professor in Accounting (Supervisor) The Graduate School of Economics and Management Tohoku University, Japan 27-1 Kawauchi, Aoba-ku, Sendai 980-8576, Japan. Tel: +81227956261. Fax: +81227956267. Mobile: +819033691657 Email: maoki@econ.tohoku.ac.jp
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## LEMBAR PERNYATAAN KESEDIAAN

Saya yang bertanda tangan di bawah ini:

Nama / Inisial : \_\_\_\_\_

Jenis Kelamin : ☐ Laki-laki ☐ Perempuan

Pendidikan Terakhir : ☐ SMA/ sederajat ☐ D3 ☐ S1  
☐ S2 ☐ S3 ☐ .....

Lama Bekerja : ..... tahun

Jabatan : .....

Dengan ini, saya telah membaca informasi terkait penelitian yang dilakukan oleh Sdr. SAIPUL ARNI MUHSYAF dan saya bersedia berpartisipasi dalam penelitian ini. Saya berpartisipasi secara sukarela dan tanpa paksaan atau tekanan dari pihak tertentu.

Semua respon jawaban yang saya berikan dalam skala penelitian ini merupakan jawaban yang jujur sesuai dengan keadaan saya yang sesungguhnya dalam kehidupan kerja sehari-hari dan bukan sekedar berdasarkan apa yang benar atau salah dan apa yang baik atau buruk dari pandangan masyarakat pada umumnya.

Saya juga mengizinkan peneliti untuk menggunakan jawaban-jawaban yang saya berikan untuk kepentingan penelitian ini.

Menyetujui,

....., ..... 2017

.....

## A - INFORMASI UMUM PRIBADI

Untuk pertanyaan-pertanyaan A1 sampai dengan A3 di bawah, mohon dicentang (✓) untuk jawaban yang sesuai dengan informasi tentang anda.

### A1

Posisi/Jabatan
<input type="checkbox"/> Pimpinan Organisasi (Direktur/Direktur Utama)
<input type="checkbox"/> Wakil Pimpinan (Wakil Direktur)
<input type="checkbox"/> Kepala Bagian (Keuangan/Administrasi/Kepegawaian/dst)
<input type="checkbox"/> Kepala Sub Bagian (Keuangan/Administrasi/Kepegawaian/dst)
<input type="checkbox"/> Kepala unit (Poli dan sejenisnya)
<input type="checkbox"/> Lainnya (mohon disebutkan) .....

### A2

Pengalaman	Kurang dari 1 tahun	1 - 5 tahun	6 – 10 tahun	Lebih dari 10 tahun
Dengan pekerjaan/ posisi saat ini	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dengan organisasi ini	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### A3

Kualifikasi Pendidikan
<input type="checkbox"/> Diploma (D1/D2/D3)
<input type="checkbox"/> Sarjana (D4/S1)
<input type="checkbox"/> Pasca Sarjana (contoh: MM, M.Si, M.Ep, MT, MKes, M.Ak, MSc., MBA, Dr, Ph.D)
<input type="checkbox"/> Kualifikasi Profesional (contohnya, Akuntan, Spesialis, mohon disebutkan) .....
<input type="checkbox"/> Lainnya (mohon disebutkan) .....

## B - INFORMASI UMUM ORGANISASI

USIA ORGANISASI	
<input type="checkbox"/> Kurang dari 5 tahun	<input type="checkbox"/> 5 s.d. kurang dari 11 tahun
<input type="checkbox"/> 11 s.d. 20 tahun	<input type="checkbox"/> More than 20 years

Tipe Organisasi	
Rumah Sakit Tingkat Kota/Kabupaten	<input type="checkbox"/>
Rumah Sakit Tingkat Provinsi	<input type="checkbox"/>
Rumah Sakit Khusus	<input type="checkbox"/>

Tipe Kelas Rumah Sakit:	
Tipe A	<input type="checkbox"/>
Tipe B	<input type="checkbox"/>
Tipe C	<input type="checkbox"/>



## C – KUISIONER BUDAYA ORGANISASI

### PETUNJUK Pengerjaan Skala

Skala ini bertujuan untuk mengetahui hasil Analisis GAP antara budaya organisasi yang diinginkan dengan budaya organisasi yang telah berjalan di Instansi tempat sekarang Bapak/ibu bekerja. Tidak ada jawaban benar maupun salah. Tujuan skala ini adalah untuk memahami pengelolaan budaya organisasi yang sesuai di Instansi tempat sekarang Bapak/ibu bekerja.

Di setiap soal (1, 2, 3, 4, 5, 6) terdapat 4 alternatif pernyataan (A, B, C, D). Berilah nilai pada keempat pernyataan tersebut dengan **skor (0-100) sehingga total jumlah skor dari keempat nilai tersebut harus 100**. Isilah dengan skor yang tinggi jika pernyataan tersebut sesuai dan skor yang rendah jika tidak sesuai dengan **keinginan / situasi yang diharapkan dari Instansi yang Bapak/Ibu pimpin untuk 5 tahun kedepan.**

#### CONTOH PENGISIAN :

	CONTOH CARA PENGISIAN	SKOR
a.	Instansi adalah tempat yang sangat pribadi. Serupa keluarga besar. Orang saling berbagi banyak hal tentang diri mereka.	<u>45</u>
b.	Instansi merupakan tempat kewirausahaan yang sangat dinamis. Orang sungguh mengikatkan diri dan siap menghadapi resiko.	<u>25</u>
c.	Instansi sangat berorientasi pada hasil. Tujuan utamanya adalah menyelesaikan pekerjaan. Setiap anggota organisasi sangat kompetitif dan berorientasi pada hasil.	<u>10</u>
d.	Instansi merupakan tempat yang sangat terkontrol dan terstruktur. Prosedur formal umumnya mengatur apa yang dikerjakan orang-orang.	<u>20</u>
	<b>TOTAL</b>	<b><u>100</u></b>

Hasil skor dari 4 kolom ini dijumlahkan

Skor hasil TOTAL penjumlahan harus 100

Masing-masing individu pasti memiliki jawaban yang berbeda pada setiap pernyataan. Oleh sebab itu, pilihlah jawaban yang paling sesuai dengan keadaan Bapak/Ibu pribadi. Sekali lagi, tidak ada jawaban yang salah.

**Selamat mengerjakan jangan sampai ada yang terlewat atau salah hitung!**

<b>1.</b>	<b>KARAKTER DOMINAN</b>	<b>SKOR</b>
A.	Instansi adalah tempat yang sangat pribadi. Serupa keluarga besar. Orang saling berbagi banyak hal tentang diri mereka.	
B.	Instansi merupakan tempat kewirausahaan yang sangat dinamis. Orang sungguh mengikatkan diri dan siap menghadapi resiko.	
C.	Instansi sangat berorientasi pada hasil. Tujuan utamanya adalah menyelesaikan pekerjaan. Setiap anggota organisasi sangat kompetitif dan berorientasi pada hasil.	
D.	Instansi merupakan tempat yang sangat terkontrol dan terstruktur. Prosedur formal umumnya mengatur apa yang dikerjakan orang-orang.	
	<b>TOTAL</b>	

<b>2.</b>	<b>POLA KEPEMIMPINAN</b>	<b>SKOR</b>
A.	Kepemimpinan dalam Instansi umumnya dianggap memberikan teladan mentoring, memfasilitasi, atau memelihara.	
B.	Kepemimpinan dalam Instansi umumnya dianggap memberikan teladan kewirausahaan, inovasi, atau keberanian mengambil resiko.	
C.	Kepemimpinan dalam Instansi ini dianggap memberikan teladan bahwa semua hal bisa dicapai, agresif, dan berfokus pada hasil.	
D.	Kepemimpinan di Instansi ini dianggap dapat memberikan teladan mengenai koordinasi, pengelolaan, atau menjalankan efisiensi secara lancar.	
	<b>TOTAL</b>	

<b>3.</b>	<b>TATA KELOLA KARYAWAN</b>	<b>SKOR</b>
A.	Gaya manajemen dalam Instansi bercirikan adanya kerja tim, kesepakatan, dan keterlibatan.	
B.	Gaya manajemen dalam Instansi bercirikan berani mengambil risiko, inovatif, memberikan kebebasan dan keunikan pada setiap individu.	
C.	Gaya manajemen dalam Instansi bercirikan kompetitif, dengan tuntutan yang tinggi dan pencapaian hasil.	
D.	Gaya manajemen dalam Instansi bercirikan rasa aman pada diri karyawan, adanya keseragaman, dapat diprediksi, dan hubungan yang stabil.	
	<b>TOTAL</b>	

<b>4.</b>	<b>PEREKAT INSTANSI</b>	<b>SKOR</b>
A.	Perekat yang membuat Instansi menyatu bersama adalah kesetiaan dan rasa saling percaya. Komitmen terhadap Instansi tinggi.	
B.	Perekat yang membuat Instansi menyatu bersama adalah komitmen untuk berinovasi dan berkembang. Ada dorongan untuk menjadi yang terdepan.	
C.	Perekat yang membuat Instansi menyatu bersama adalah orientasi pada prestasi dan pencapaian hasil.	
D.	Perekat yang membuat Instansi menyatu bersama adalah peraturan dan kebijakan formal. Memelihara kelancaran jalannya Instansi merupakan hal yang penting.	
	<b>TOTAL</b>	

<b>5.</b>	<b>PENEKANAN STRATEGI</b>	<b>SKOR</b>
A.	Instansi menekankan pada pengembangan SDM. Kepercayaan tinggi, keterbukaan, partisipasi dan selalu melibatkan anggota Instansi.	
B.	Instansi menekankan pada mendapatkan sumber daya baru dan menciptakan tantangan baru. Mencoba hal yang baru, dan mengharapkan kesempatan adalah sesuatu yang dinilai berharga.	
C.	Instansi menekankan pada persaingan dan prestasi. Melampaui target kerja dan memenangkan persaingan merupakan hal yang paling utama.	
D.	Instansi menekankan pada pentingnya keajegan dan stabilitas. Efisiensi, pengendalian, dan pelaksanaan pekerjaan secara lancar merupakan hal yang penting.	
	<b>TOTAL</b>	

<b>6.</b>	<b>KRITERIA KEBERHASILAN</b>	<b>SKOR</b>
A.	Instansi mendefinisikan keberhasilan atas dasar pengembangan SDM, kerja tim, komitmen karyawan, dan kepedulian pada anggota Instansi.	
B.	Instansi mendefinisikan keberhasilan atas dasar memiliki produk/jasa, yang paling unik atau yang terbaru. Instansi ini merupakan pemimpin produk (product leader) dan inovator.	
C.	Instansi mendefinisikan keberhasilan atas dasar kemenangan dalam pemasaran dan keunggulan dalam bersaing. Menjadi pemimpin pasar yang kompetitif adalah kunci suksesnya.	
D.	Instansi mendefinisikan keberhasilan atas dasar efisiensi. Terjaminnya kehandalan dalam memenuhi tuntutan, penjadwalan yang lancar, dan ongkos produksi yang rendah merupakan hal yang penting.	
	<b>TOTAL</b>	

*Mohon periksa kembali jawaban Bapak/Ibu untuk kelengkapan dan ketepatan jawaban.*

## D – PENERIMAAN SISTEM PENGUKURAN KINERJA FINANSIAL DAN NON FINANSIAL

Mohon menjawab pertanyaan-pertanyaan berikut dengan melingkari nomor sesuai skala yang disediakan. Mohon diberikan lingkaran yang jelas dan jika hendak mengoreksi jawaban, hapuslah terlebih dahulu jawaban yang salah terlebih dahulu.

1	2	3	4	5
Sangat tidak setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju

D1	Penggunaan sistem pengukuran kinerja keuangan dalam pekerjaan saya akan membantu saya dalam mengevaluasi kinerja organisasi/instansi	1	2	3	4	5
D2	Penggunaan sistem pengukuran kinerja non-keuangan dalam pekerjaan saya akan membantu saya dalam mengevaluasi kinerja organisasi/instansi	1	2	3	4	5
D3	Penggunaan sistem pengukuran kinerja tingkat lanjut (misalnya, <i>Balanced scorecard</i> ) di pekerjaan saya akan membantu saya dalam mengevaluasi kinerja organisasi/instansi	1	2	3	4	5
D4	Penggunaan sistem pengukuran kinerja tingkat lanjut (misalnya, <i>Balanced scorecard</i> ) di pekerjaan saya akan meningkatkan efektifitas saya dalam bekerja	1	2	3	4	5
D5	Pada akhirnya, saya akan menemukan bahwa sistem pengukuran kinerja (misalnya, <i>balanced scorecard</i> ) itu bermanfaat bagi pekerjaan saya.	1	2	3	4	5

## E – SISTEM PENGUKURAN KINERJA DI UNIT ORGANISASI ANDA

### Bagian 1.

Untuk masing-masing kategori yang tercantum di bawah ini, mohon tunjukkan pentingnya indikator kinerja yang berada dalam kategori masing-masing sebagai pendorong keberhasilan jangka panjang organisasi Anda. Dengan menggunakan skala di bawah ini, lingkari nomor yang dipilih dengan jelas dan jika Anda ingin memperbaiki jawaban Anda, hapus jawaban yang salah dengan benar terlebih dahulu.

5	4	3	2	1
Sangat-sangat penting	Penting	Cukup Penting	Tidak Penting	Tidak Penting Sama Sekali

	Kategori kinerja	Tingkat Pentingnya Indikator				
E1	Keuangan (contohnya keuntungan/pendapatan per tahun, tingkat pengembalian asset (ROA), pengurangan biaya/belanja, biaya pelayanan administrasi per pasien, tarif pelayanan, dst)	1	2	3	4	5
E2	Pelanggan (pasien), (contohnya kepuasan pasien, tingkat retensi (keinginan untuk kembali) pasien)	1	2	3	4	5
E3	Inovasi (contohnya program pendidikan dan latihan)	1	2	3	4	5
E4	Karyawan (contohnya kepuasan karyawan, kemampuan/kapasitas pegawai, dsb)	1	2	3	4	5
E5	Kualitas (contohnya piagam, akreditasi, dsb)	1	2	3	4	5
E6	Komunitas/masyarakat (contohnya citra publik, keterlibatan masyarakat, dsb)	1	2	3	4	5

Bagian 2:

Untuk masing-masing kategori yang tercantum di bawah ini, indikasikan sejauh mana penggunaan indikator-indikator berikut digunakan untuk mengevaluasi kinerja anda. Dengan menggunakan skala di bawah ini, lingkari nomor yang dipilih dengan jelas dan jika Anda ingin memperbaiki jawaban Anda, hapus jawaban yang salah dengan hati-hati terlebih dahulu.

1	2	3	4	5
Tidak digunakan sama sekali	Jarang sekali digunakan	Cukup sering digunakan	Digunakan secara signifikan	Sangat sering digunakan

	Kategori kinerja	Tingkat Penggunaan				
E1	Keuangan (contohnya keuntungan/pendapatan per tahun, tingkat pengembalian asset (ROA), pengurangan biaya/belanja, biaya pelayanan administrasi per pasien, tarif pelayanan, dst)	1	2	3	4	5
E2	Pelanggan (pasien), (contohnya kepuasan pasien, tingkat retensi (keinginan untuk kembali) pasien)	1	2	3	4	5
E3	Inovasi (contohnya program pendidikan dan latihan)	1	2	3	4	5
E4	Karyawan (contohnya kepuasan karyawan, kemampuan/kapasitas pegawai, dsb)	1	2	3	4	5
E5	Kualitas (contohnya piagam, akreditasi, dsb)	1	2	3	4	5
E6	Komunitas/masyarakat (contohnya citra publik, keterlibatan masyarakat, dsb)	1	2	3	4	5

# Appendix 2. Respondents' responses

No.	Gender	Education	Position	Experience	CC1	CC2	CC3	CC4	CC5	CC6	AC1	AC2	AC3	AC4	AC5	AC6	MC1	MC2
1	Female	Diploma	n.a	< 1 year	30	25	45	40	45	30	35	25	25	30	25	30	25	25
2	Female	under graduate	n.a	1 - 5 years	30	35	30	20	25	30	30	25	25	25	25	20	20	20
3	Female	Diploma	n.a	< 1 year	20	10	25	15	25	25	15	20	15	20	15	15	35	40
4	Male	Diploma	n.a	< 1 year	45	45	45	45	45	45	25	25	15	20	25	20	10	10
5	Male	Diploma	n.a	< 1 year	20	15	15	35	30	30	30	30	30	25	25	25	15	20
6	Female	under graduate	n.a	< 1 year	20	20	25	30	25	40	20	20	15	20	15	20	30	25
7	Male	under graduate	n.a	< 1 year	25	25	35	30	25	40	20	25	15	30	25	20	25	25
8	Female	under graduate	n.a	< 1 year	20	25	15	20	25	20	20	20	20	30	25	20	30	30
9	Male	under graduate	n.a	< 1 year	25	35	30	40	30	35	30	25	25	30	25	25	25	10
10	Female	Diploma	n.a	< 1 year	35	45	30	40	35	45	25	25	20	20	20	20	20	10
11	Female	under graduate	n.a	< 1 year	40	30	45	25	40	40	25	15	25	25	20	15	15	25
12	Female	Diploma	n.a	< 1 year	20	25	25	25	25	25	20	25	25	25	25	25	30	25
13	Female	under graduate	n.a	1 - 5 years	40	30	30	30	40	35	25	25	30	30	20	25	20	20
14	Female	under graduate	n.a	< 1 year	20	25	30	40	20	40	20	20	20	10	20	20	30	25
15	Male	under graduate	n.a	< 1 year	25	20	25	45	20	40	25	30	25	20	20	20	25	20
16	Female	Diploma	n.a	< 1 year	35	45	40	40	30	35	25	30	20	30	30	25	10	10
17	Male	under graduate	n.a	< 1 year	30	35	25	50	20	30	20	25	20	15	20	20	30	15
18	Female	under graduate	n.a	< 1 year	25	25	25	30	25	35	25	25	25	20	25	20	25	25
19	Female	Diploma	other (functional)	n.a	40	40	40	25	30	30	20	15	20	25	20	20	30	30
20	Male	Diploma	n.a	< 1 year	30	25	20	35	30	25	25	30	30	20	20	25	15	20
21	Male	under graduate	Head unit	< 1 year	25	30	40	30	25	25	20	25	20	25	25	25	25	20
22	Male	n.a	n.a	< 1 year	30	25	25	20	20	30	20	20	30	25	25	20	25	25
23	Male	Diploma	n.a	< 1 year	20	30	30	25	20	35	25	25	20	20	25	20	20	20
24	Female	Diploma	n.a	< 1 year	20	25	25	40	30	25	20	25	25	10	20	25	40	25
25	Female	under graduate	n.a	< 1 year	30	25	30	25	30	20	25	25	20	25	30	25	30	25
26	Male	under graduate	n.a	< 1 year	30	45	45	20	45	45	20	20	20	20	10	20	15	10
27	Male	Diploma	n.a	< 1 year	25	20	20	25	20	25	30	25	30	25	30	25	20	30
28	Female	under graduate	n.a	1 - 5 years	20	25	25	25	25	25	25	25	25	15	25	25	25	25
29	Female	Post graduate	n.a	n.a	45	40	45	45	45	45	25	20	25	25	25	20	10	20
30	Female	under graduate	n.a	< 1 year	20	30	20	25	25	25	30	30	30	25	25	25	20	10
31	Female	under graduate	n.a	< 1 year	30	25	25	45	45	45	20	20	20	10	20	20	20	10
32	Female	under graduate	n.a	< 1 year	30	25	35	45	20	45	25	25	25	20	25	20	20	10
33	Female	under graduate	n.a	n.a	20	30	10	20	10	30	25	25	30	35	25	25	25	20
34	Male	Diploma	n.a	n.a	30	25	30	50	40	35	25	20	30	20	20	25	10	15
35	Male	Diploma	other (functional)	> 5 years	25	20	10	20	10	20	25	25	25	10	20	20	20	10
36	Female	under graduate	other (functional)	> 5 years	10	30	10	10	20	25	25	25	30	25	25	30	20	20
37	Male	under graduate	n.a	n.a	25	40	30	20	30	30	25	20	30	20	30	30	25	10
38	Female	Diploma	n.a	< 1 year	25	30	30	25	25	30	25	20	30	25	25	15	25	25
39	Male	Diploma	n.a	< 1 year	40	35	35	25	40	25	25	25	25	25	20	25	25	20
40	Female	under graduate	ward	> 5 years	30	30	20	10	20	30	20	20	30	20	20	20	20	30
41	Female	under graduate	n.a	n.a	40	40	50	40	50	40	20	15	10	10	20	20	20	20
42	Female	under graduate	n.a	n.a	25	30	30	25	30	40	25	20	30	25	20	25	25	20
43	Female	Diploma	n.a	> 5 years	30	30	30	25	25	40	25	30	20	25	25	20	20	20
44	Female	Diploma	n.a	< 1 year	30	40	30	25	30	25	25	25	30	25	30	25	20	15
45	Male	Diploma	n.a	< 1 year	20	20	40	25	30	30	30	20	25	30	25	20	25	20
46	Male	under graduate	n.a	< 1 year	45	45	45	45	45	50	25	25	20	20	20	20	10	10
47	Female	under graduate	n.a	1 - 5 years	45	45	45	45	45	50	25	15	25	25	10	15	10	25
48	Female	Diploma	n.a	< 1 year	30	20	30	40	30	30	30	30	30	20	25	25	20	30
49	Male	under graduate	n.a	n.a	25	30	30	25	25	30	30	20	30	30	25	20	25	25
50	Female	Diploma	n.a	< 1 year	35	35	35	60	55	50	30	25	25	15	15	20	15	20
51	Female	under graduate	Head unit	< 1 year	40	50	50	50	50	50	20	20	20	20	20	20	20	10
52	Male	under graduate	n.a	< 1 year	35	40	50	45	40	35	20	20	15	15	20	20	30	15
53	Male	under graduate	n.a	< 1 year	30	20	30	40	30	25	30	30	25	30	25	25	15	10
54	Male	under graduate	n.a	n.a	40	50	50	50	50	50	20	20	20	20	20	20	10	10
55	Male	Diploma	n.a	< 1 year	10	10	10	10	30	20	25	20	20	20	20	20	30	40
56	Female	under graduate	n.a	< 1 year	20	35	30	40	30	25	20	20	25	25	30	25	30	15
57	Female	Diploma	Head unit	< 1 year	35	35	30	25	30	35	25	25	30	35	30	25	20	15
58	Female	n.a	ward	< 1 year	25	35	30	45	20	35	25	15	20	10	20	20	20	25
59	Female	Post graduate	n.a	< 1 year	20	30	35	30	30	25	20	25	20	25	25	25	20	20
60	Female	under graduate	n.a	< 1 year	25	35	20	20	25	30	25	20	40	25	25	25	25	15
61	Male	Diploma	n.a	< 1 year	30	30	25	30	25	30	30	25	25	30	25	30	20	25
62	Female	Diploma	other (functional)	n.a	30	30	30	30	30	30	25	30	30	25	25	25	25	20
63	Female	Diploma	ward	1 - 5 years	30	35	35	30	35	40	25	20	25	25	25	20	20	25
64	Female	under graduate	n.a	< 1 year	30	25	45	40	45	40	30	20	25	30	20	20	25	25
65	Female	Diploma	n.a	< 1 year	30	25	45	40	45	40	35	20	25	30	20	20	20	25
66	Female	under graduate	n.a	1 - 5 years	25	25	45	40	45	40	35	30	25	30	20	25	30	20
67	Female	Diploma	n.a	< 1 year	25	25	25	25	40	25	25	25	25	25	20	25	25	25
68	Female	Diploma	n.a	< 1 year	30	35	45	35	40	30	25	20	20	25	25	25	25	20
69	Male	Diploma	n.a	< 1 year	12	14	20	22	30	25	16	15	22	15	16	20	20	21
70	Female	Diploma	n.a	< 1 year	35	50	30	40	50	40	20	20	20	15	20	15	25	20
71	Male	under graduate	n.a	< 1 year	30	30	35	25	30	30	30	25	35	25	20	20	20	25
72	Male	Diploma	n.a	< 1 year	40	35	30	25	30	35	30	30	20	25	25	20	15	10
73	Female	Diploma	n.a	< 1 year	20	20	10	30	20	25	20	15	25	20	15	20	40	30
74	Male	Diploma	n.a	< 1 year	25	20	10	30	20	20	20	10	20	20	15	15	30	30
75	Male	Diploma	n.a	< 1 year	40	30	30	20	40	30	25	30	25	30	30	25	10	10
76	Male	Diploma	Head unit	n.a	30	45	25	25	45	45	30	25	15	25	15	15	25	15



No.	Gender	Education	Position	Experience	CC1	CC2	CC3	CC4	CC5	CC6	AC1	AC2	AC3	AC4	AC5	AC6	MC1	MC2
77	Male	under graduate	Head unit	< 1 year	25	45	40	30	40	35	25	20	20	30	30	20	25	20
78	Female	under graduate	n.a	1 - 5 years	30	25	20	10	25	30	20	30	25	30	20	25	20	30
79	Female	Diploma	n.a	< 1 year	30	25	45	40	45	35	30	30	25	30	20	25	20	10
80	Female	Diploma	n.a	1 - 5 years	40	30	40	30	40	40	25	20	20	30	20	20	20	30
81	Female	under graduate	other (functional)	< 1 year	30	40	20	20	20	30	30	30	30	30	30	25	25	10
82	Female	Diploma	n.a	n.a	25	25	25	25	25	25	25	25	25	25	25	25	20	25
83	Female	under graduate	other (functional)	n.a	20	25	10	20	45	20	40	30	40	40	30	30	20	15
84	Female	Diploma	n.a	1 - 5 years	25	25	30	40	30	35	30	25	20	35	25	25	15	20
85	Female	under graduate	n.a	< 1 year	20	25	30	40	30	35	30	25	20	30	25	25	25	15
86	Female	Diploma	other (functional)	< 1 year	25	30	20	25	30	30	25	30	25	30	25	25	30	20
87	Female	Diploma	ward	1 - 5 years	35	45	40	45	35	40	25	25	30	25	20	20	20	15
88	Female	Diploma	n.a	< 1 year	30	30	30	45	45	25	25	20	10	25	20	20	20	15
89	Female	Diploma	n.a	< 1 year	40	30	50	40	30	30	30	30	30	30	30	25	20	20
90	Female	under graduate	ward	1 - 5 years	45	30	25	45	45	40	30	25	20	25	25	25	10	25
91	Female	Diploma	n.a	< 1 year	20	30	25	25	30	30	20	20	25	25	20	20	20	25
92	Female	Diploma	n.a	n.a	35	45	40	45	35	35	25	25	30	25	30	25	15	15
93	Male	under graduate	n.a	n.a	20	20	30	30	20	15	20	15	20	20	25	20	25	40
94	Female	Diploma	other (functional)	n.a	30	30	30	20	30	30	20	20	15	30	20	20	20	20
95	Female	under graduate	n.a	n.a	30	20	40	30	25	30	20	20	20	25	25	20	25	30
96	Male	Diploma	ward	< 1 year	25	25	30	25	15	30	20	25	20	25	20	20	25	25
97	Male	under graduate	n.a	< 1 year	30	30	30	50	50	40	25	20	20	10	20	20	25	20
98	Female	under graduate	n.a	< 1 year	20	40	50	20	15	35	30	30	30	30	30	30	25	10
99	Male	under graduate	n.a	1 - 5 years	40	25	35	30	30	30	30	35	30	30	25	25	10	30
100	Male	Diploma	Head unit	1 - 5 years	25	25	25	25	20	25	25	25	25	25	20	25	25	25
101	Female	Diploma	Head unit	< 1 year	20	20	25	25	30	25	30	25	25	25	20	25	25	25
102	Female	under graduate	n.a	n.a	20	40	30	25	35	30	30	30	35	45	30	30	20	10
103	Female	Diploma	n.a	< 1 year	25	35	20	25	45	30	35	25	25	35	25	25	15	20
104	Female	Diploma	ward	1 - 5 years	25	20	20	20	25	40	30	25	25	25	20	20	25	20
105	Female	under graduate	n.a	< 1 year	15	20	20	15	30	35	25	20	20	20	25	20	25	25
106	Male	Diploma	n.a	< 1 year	30	30	35	25	35	40	30	25	30	30	20	25	25	20
107	Male	under graduate	other (functional)	< 1 year	40	45	30	25	25	40	25	20	20	25	30	25	15	10
108	Male	under graduate	ward	1 - 5 years	35	25	40	25	30	40	25	25	30	25	25	25	20	20
109	Male	under graduate	n.a	< 1 year	25	20	30	25	20	35	25	20	20	25	30	20	30	20
110	Female	under graduate	n.a	< 1 year	30	20	25	25	20	25	20	25	30	25	20	25	30	15
111	Male	under graduate	n.a	< 1 year	35	30	30	50	40	40	25	30	30	30	20	30	20	20
112	Female	under graduate	n.a	< 1 year	35	30	30	50	25	25	15	20	15	10	20	20	30	20
113	Female	Diploma	n.a	< 1 year	35	30	40	20	50	35	20	15	10	25	15	20	25	30
114	Female	under graduate	n.a	< 1 year	25	30	25	30	25	30	25	20	25	20	25	25	25	25
115	Male	Diploma	ward	< 1 year	45	25	30	45	30	40	15	15	20	15	20	20	25	25
116	Male	under graduate	other (functional)	< 1 year	25	25	25	25	25	25	25	25	25	25	25	25	25	25
117	Female	under graduate	n.a	n.a	45	25	30	45	30	45	25	15	20	15	20	20	10	25
118	Female	under graduate	n.a	1 - 5 years	30	40	45	10	20	45	25	25	20	25	25	25	30	20
119	Female	Diploma	n.a	< 1 year	20	25	40	30	30	30	25	25	20	30	25	30	20	25
120	Female	Diploma	n.a	< 1 year	30	40	40	30	25	40	20	20	20	25	25	25	25	10
121	Female	Diploma	n.a	n.a	40	45	35	20	30	40	25	15	20	20	20	20	15	20
122	Female	Diploma	n.a	< 1 year	25	15	20	40	25	35	15	15	20	15	15	15	25	35
123	Female	under graduate	n.a	< 1 year	30	35	25	30	30	30	20	20	25	30	25	25	25	20
124	Female	Diploma	n.a	< 1 year	40	50	50	50	50	50	20	20	10	20	20	20	15	10
125	Female	under graduate	n.a	< 1 year	35	25	20	30	45	35	25	30	30	20	20	25	20	25
126	Female	Diploma	n.a	< 1 year	30	25	15	25	30	20	25	25	25	25	20	30	25	25
127	Female	under graduate	n.a	1 - 5 years	25	20	25	20	25	35	35	30	30	20	35	30	15	30
128	Male	under graduate	n.a	< 1 year	25	25	25	30	25	25	20	20	20	25	20	20	30	20
129	Male	Diploma	n.a	< 1 year	25	25	25	30	25	25	20	20	20	25	20	20	25	20
130	Male	Diploma	other (functional)	< 1 year	25	30	30	20	20	30	30	20	30	25	30	25	25	20
131	Female	Others	other (functional)	4	25	25	30	25	20	45	15	25	30	15	20	15	30	30
132	Female	Diploma	other (functional)	< 1 year	25	20	20	20	20	35	25	25	25	20	25	20	20	15
133	Female	Diploma	other (functional)	< 1 year	25	30	30	20	40	20	25	25	20	40	30	30	15	20
134	Female	Diploma	other (functional)	< 1 year	25	15	20	25	15	25	25	25	15	15	30	15	20	20
135	Male	Post graduate	Head unit	< 1 year	30	35	20	40	30	40	20	15	30	10	20	15	20	20
136	Female	Diploma	other (functional)	4	25	20	35	25	20	20	30	30	20	35	35	25	30	20
137	Female	Diploma	other (functional)	4	30	20	20	25	20	25	30	20	20	25	20	25	20	20
138	Female	Diploma	other (functional)	< 1 year	20	30	40	30	25	30	20	20	20	25	15	15	20	30
139	Male	Diploma	other (functional)	> 5 years	25	25	20	15	20	20	25	25	20	25	25	25	20	15
140	Male	under graduate	other (functional)	1 - 5 years	20	35	25	25	25	25	20	20	25	25	25	25	35	25
141	Male	Diploma	other (functional)	< 1 year	20	30	15	15	35	30	30	30	25	35	20	25	30	20
142	Male	Diploma	other (functional)	< 1 year	25	30	25	25	25	25	15	20	15	25	20	25	25	25
143	Male	Diploma	other (functional)	< 1 year	25	35	30	35	30	40	25	30	15	35	30	20	30	20
144	Female	Diploma	other (functional)	< 1 year	20	25	15	25	15	20	30	30	35	20	35	25	30	20
145	Female	Diploma	other (functional)	< 1 year	25	25	25	25	25	40	25	25	25	15	20	15	20	25
146	Male	Diploma	other (functional)	< 1 year	20	25	25	20	25	35	25	20	25	20	20	20	30	25
147	Male	Diploma	other (functional)	< 1 year	25	20	20	15	15	30	30	35	35	30	30	30	30	20
148	Male	Diploma	other (functional)	< 1 year	25	25	25	25	15	15	25	20	25	30	20	20	30	25
149	Male	Diploma	other (functional)	< 1 year	25	20	25	20	25	25	20	20	35	20	25	25	30	30
150	Female	Diploma	other (functional)	< 1 year	25	20	15	20	35	35	25	20	20	35	20	20	20	30
151	Female	Diploma	other (functional)	< 1 year	25	25	25	20	30	20	30	30	30	15	25	25	25	20
152	Female	Diploma	other (functional)	< 1 year	20	25	30	35	30	35	30	25	30	25	25	20	25	20

No.	Gender	Education	Position	Experience	CC1	CC2	CC3	CC4	CC5	CC6	AC1	AC2	AC3	AC4	AC5	AC6	MC1	MC2
153	Female	Diploma	other (functional)	< 1 year	40	25	30	30	45	30	25	20	30	30	20	25	25	40
154	Female	Diploma	other (functional)	< 1 year	25	20	20	30	40	25	20	20	20	15	20	25	25	40
155	Female	Diploma	other (functional)	< 1 year	15	10	30	25	25	25	20	25	20	20	30	25	35	30
156	Female	Diploma	other (functional)	< 1 year	20	25	25	25	25	15	30	35	35	30	30	30	25	15
157	Female	Diploma	other (functional)	< 1 year	20	25	25	30	25	20	30	20	30	25	20	30	30	20
158	Female	Diploma	other (functional)	< 1 year	25	25	25	30	25	25	20	20	20	25	20	20	30	20
159	Female	Diploma	other (functional)	< 1 year	25	30	25	25	25	30	30	20	25	25	25	25	25	25
160	Female	Diploma	other (functional)	< 1 year	25	30	35	15	15	15	20	25	15	25	20	25	30	15
161	Female	Diploma	other (functional)	< 1 year	20	25	30	20	15	30	20	20	25	10	25	20	30	20
162	Female	Diploma	other (functional)	< 1 year	30	25	20	25	25	25	20	25	25	25	20	25	20	20
163	Male	Diploma	other (functional)	< 1 year	20	18	25	25	30	25	25	27	35	20	25	25	20	20
164	Male	Diploma	other (functional)	< 1 year	20	18	25	25	30	25	25	27	35	20	25	25	20	20
165	Female	Diploma	other (functional)	1 - 5 years	30	30	20	20	30	25	25	20	30	30	20	25	20	20
166	Female	under graduate	other (functional)	< 1 year	25	25	20	20	30	20	30	30	30	15	25	25	20	20
167	Female	Diploma	other (functional)	> 5 years	30	15	20	30	20	25	25	25	20	10	20	20	20	30
168	Female	under graduate	other (functional)	> 5 years	25	30	25	10	20	35	15	20	15	25	20	15	20	20
169	Female	under graduate	other (functional)	4	20	30	20	20	30	30	35	25	30	30	25	30	20	15
170	Female	Diploma	other (functional)	< 1 year	25	25	20	20	20	30	25	20	30	30	30	20	25	25
171	Female	under graduate	other (functional)	4	35	15	20	35	15	30	20	20	20	15	15	20	25	30
172	Male	Diploma	other (functional)	< 1 year	25	20	30	20	5	15	20	20	10	20	25	20	20	25
173	Male	Diploma	other (functional)	< 1 year	15	20	25	15	10	25	20	15	25	20	35	25	15	20
174	Female	Diploma	other (functional)	< 1 year	20	20	15	15	30	20	25	30	30	30	20	25	25	25
175	Female	Diploma	other (functional)	< 1 year	30	20	25	25	50	25	25	20	25	25	20	25	20	35
176	Male	under graduate	other (functional)	< 1 year	20	15	15	15	20	35	15	15	15	20	20	15	35	35
177	Female	Diploma	other (functional)	< 1 year	20	15	15	15	20	25	15	15	15	20	20	20	35	35
178	Male	Diploma	other (functional)	< 1 year	30	15	15	15	20	25	20	15	15	20	20	20	20	35
179	Female	under graduate	other (functional)	< 1 year	25	20	30	20	25	30	25	20	20	15	10	20	20	30
180	Male	under graduate	ward	< 1 year	15	20	15	15	20	30	20	15	15	20	20	20	30	30
181	Female	Diploma	other (functional)	< 1 year	25	20	20	15	20	25	25	20	25	25	20	25	25	30
182	Female	Diploma	other (functional)	< 1 year	20	25	25	25	25	20	25	25	25	35	25	25	30	35
183	Male	Diploma	other (functional)	< 1 year	25	15	15	15	20	30	20	15	15	20	20	15	25	35
184	Female	Diploma	other (functional)	< 1 year	25	25	30	25	30	25	25	25	15	15	25	25	20	25
185	Male	Diploma	other (functional)	< 1 year	25	25	25	25	20	25	25	25	25	25	20	25	20	25
186	Female	under graduate	other (functional)	< 1 year	25	25	25	25	20	25	25	25	25	25	20	25	20	25
187	Female	Diploma	other (functional)	1 - 5 years	25	25	25	25	20	25	20	25	25	25	15	25	25	25
188	Female	Diploma	other (functional)	< 1 year	20	25	25	25	25	25	20	25	25	25	25	25	25	25
189	Male	under graduate	other (functional)	< 1 year	20	25	25	25	25	25	25	25	25	25	25	25	30	25
190	Female	Diploma	other (functional)	> 5 years	30	25	25	25	25	25	25	25	25	25	25	25	20	25
191	Female	Diploma	other (functional)	1 - 5 years	30	25	25	25	25	25	20	25	25	25	25	25	20	25
192	Female	Diploma	other (functional)	1 - 5 years	15	25	25	25	25	25	20	25	25	25	25	25	30	25
193	Female	Diploma	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
194	Male	Others	other (functional)	> 5 years	20	25	25	25	25	25	20	25	25	25	25	25	25	25
195	Male	under graduate	other (functional)	> 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
196	Female	Diploma	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	20	25
197	Female	under graduate	other (functional)	> 5 years	25	25	25	25	25	25	30	25	25	25	25	25	15	25
198	Female	Others	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	20	25
199	Male	Others	other (functional)	< 1 year	25	25	25	25	25	25	25	25	25	25	25	25	25	25
200	Male	under graduate	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
201	Female	Diploma	other (functional)	1 - 5 years	25	25	25	25	20	25	25	25	25	25	20	25	25	25
202	Female	under graduate	other (functional)	1 - 5 years	25	25	25	25	20	25	25	25	25	25	20	25	25	25
203	Male	under graduate	other (functional)	1 - 5 years	25	25	25	25	20	25	25	25	25	25	25	25	25	25
204	Female	under graduate	other (functional)	1 - 5 years	25	25	25	25	20	25	25	25	25	25	25	25	25	25
205	Female	under graduate	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
206	Male	Others	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
207	Male	under graduate	Head unit	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
208	Male	Diploma	other (functional)	< 1 year	25	25	25	25	25	25	25	25	25	25	25	25	25	25
209	Male	Diploma	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
210	Male	Post graduate	other (functional)	> 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
211	Male	Diploma	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
212	Male	under graduate	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	15	25
213	Female	under graduate	other (functional)	> 5 years	25	25	25	25	25	25	25	25	25	25	25	25	20	25
214	Male	under graduate	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	15	25
215	Female	under graduate	other (functional)	1 - 5 years	25	25	25	25	25	25	20	25	25	25	25	25	20	25
216	Male	Diploma	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
217	Female	Others	other (functional)	1 - 5 years	25	25	25	25	25	25	25	25	25	25	25	25	25	25
218	Male	under graduate	ward	> 5 years	20	15	15	15	20	35	20	15	15	20	20	20	25	35
219	Male	Diploma	other (functional)	1 - 5 years	25	15	15	15	20	25	20	15	15	20	20	25	25	35
220	Female	under graduate	other (functional)	> 5 years	25	15	15	15	20	30	20	15	15	20	20	20	20	35
221	Female	under graduate	other (functional)	< 1 year	20	15	15	15	20	30	20	15	15	20	20	25	30	35
222	Male	under graduate	other (functional)	1 - 5 years	25	15	15	15	20	30	20	15	15	20	20	20	30	35
223	Male	Diploma	other (functional)	1 - 5 years	20	15	15	15	20	35	20	15	15	20	20	20	25	35
224	Female	under graduate	other (functional)	1 - 5 years	30	15	15	20	20	30	20	15	15	20	20	25	25	35
225	Female	under graduate	other (functional)	> 5 years	25	15	15	15	20	30	20	15	15	20	20	20	20	35
226	Male	under graduate	Head unit	1 - 5 years	20	15	15	15	20	35	25	15	15	20	20	15	30	35

No.	MC3	MC4	MC5	MC6	HC1	HC2	HC3	HC4	HC5	HC6	PU1	PU2	PU3	PU4	PU5
1	10	10	10	20	10	25	20	20	20	20	Agree	Neutral	Agree	Neutral	Neutral
2	20	30	25	25	20	20	25	25	25	25	Neutral	Neutral	Neutral	Agree	Neutral
3	30	30	30	30	30	30	30	35	30	30	Agree	Agree	Neutral	Agree	Disagree
4	20	10	20	20	20	20	20	25	10	15	Agree	Neutral	Agree	Strongly Agree	Agree
5	25	15	20	20	35	35	30	25	25	25	Agree	Neutral	Agree	Agree	Neutral
6	20	25	25	20	30	35	40	25	35	20	Agree	Agree	Strongly Agree	Agree	Agree
7	25	20	25	20	30	25	25	20	25	20	Neutral	Agree	Agree	Strongly Agree	Neutral
8	30	30	20	20	30	25	35	20	30	40	Agree	Agree	Neutral	Neutral	Neutral
9	20	10	25	20	20	30	25	20	20	20	Agree	Agree	Agree	Agree	Agree
10	10	20	20	10	20	20	40	20	25	25	Agree	Neutral	Neutral	Neutral	Agree
11	20	20	15	25	20	30	10	30	25	20	Agree	Strongly Agree	Agree	Agree	Agree
12	25	25	25	25	30	25	25	25	25	25	Strongly Agree	Agree	Neutral	Agree	Neutral
13	20	20	20	20	15	25	20	20	20	20	Agree	Agree	Neutral	Agree	Agree
14	20	10	20	15	30	30	30	40	40	25	Agree	Strongly Agree	Agree	Strongly Agree	Agree
15	20	10	20	15	25	30	30	25	40	25	Agree	Agree	Strongly Agree	Agree	Agree
16	20	15	20	20	30	15	20	15	20	20	Neutral	Neutral	Agree	Neutral	Agree
17	15	15	35	25	20	25	40	20	25	25	Agree	Strongly Agree	Agree	Strongly Agree	Neutral
18	25	25	25	20	25	25	25	25	25	25	Agree	Agree	Neutral	Agree	Strongly Agree
19	15	25	15	25	10	15	25	25	35	25	Neutral	Agree	Neutral	Agree	Neutral
20	20	15	20	25	30	25	30	30	30	25	Neutral	Neutral	Neutral	Neutral	Neutral
21	20	25	25	25	30	25	20	20	25	25	Neutral	Strongly Agree	Strongly Agree	Agree	Agree
22	20	30	25	20	25	30	25	25	30	30	Agree	Agree	Neutral	Agree	Agree
23	20	30	25	20	35	25	30	25	30	25	Agree	Neutral	Neutral	Neutral	Agree
24	25	40	30	25	20	25	25	10	20	25	Agree	Neutral	Neutral	Agree	Neutral
25	10	25	20	25	15	25	40	25	20	30	Agree	Neutral	Neutral	Agree	Neutral
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30	20	25	25	25	30	30	30	25	25	25	Agree	Strongly Agree	Strongly Agree	Neutral	Agree
31	20	20	10	10	30	45	35	25	25	25	Agree	Neutral	Neutral	Agree	Neutral
32	15	20	20	10	25	40	25	15	35	25	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Strongly Agree
33	20	15	20	20	30	25	40	30	45	25	Neutral	Agree	Neutral	Neutral	Agree
34	10	10	10	10	35	40	30	20	30	30	Agree	Neutral	Neutral	Agree	Disagree
35	20	25	25	20	30	45	45	45	45	40	Neutral	Neutral	Neutral	Agree	Neutral
36	20	20	10	20	45	25	40	45	45	25	Agree	Agree	Neutral	Disagree	Neutral
37	15	20	20	20	25	30	25	40	20	20	Agree	Agree	Agree	Agree	Agree
38	20	40	25	30	25	25	20	10	25	25	Agree	Neutral	Neutral	Agree	Neutral
39	25	25	20	25	10	20	15	25	20	25	Neutral	Agree	Agree	Agree	Agree
40	30	30	30	20	30	20	20	40	30	30	Neutral	Agree	Neutral	Neutral	Neutral
41	10	20	20	10	20	25	30	30	10	30	Agree	Neutral	Agree	Agree	Strongly Agree
42	10	25	20	20	25	30	30	25	30	15	Neutral	Neutral	Agree	Agree	Agree
43	25	25	25	20	25	20	25	25	25	20	Agree	Agree	Agree	Agree	Strongly Agree
44	10	25	15	25	25	20	30	25	25	25	Neutral	Strongly Agree	Neutral	Agree	Neutral
45	15	25	25	20	25	40	20	20	20	30	Agree	Strongly Agree	Agree	Agree	Agree
46	25	10	25	15	20	20	10	25	10	15	Agree	Agree	Agree	Strongly Agree	Agree
47	10	10	15	15	20	15	20	20	30	20	Agree	Agree	Agree	Strongly Agree	Agree
48	15	25	20	15	20	20	25	15	25	30	Agree	Neutral	Agree	Agree	Agree
49	20	20	30	20	20	25	20	25	20	30	Agree	Neutral	Neutral	Neutral	Neutral
50	20	20	20	10	20	20	20	5	10	20	Neutral	Agree	Agree	Neutral	Neutral
51	10	10	20	20	20	20	20	20	10	10	Neutral	Agree	Agree	Strongly Agree	Agree
52	20	20	20	25	15	25	15	20	20	20	Disagree	Agree	Neutral	Neutral	Agree
53	20	15	15	25	25	40	25	15	30	25	Strongly Agree	Strongly Agree	Agree	Neutral	Strongly Agree
54	10	10	20	20	30	20	20	20	10	10	Neutral	Agree	Neutral	Strongly Agree	Neutral
55	30	30	20	20	35	30	40	40	30	40	Agree	Agree	Neutral	Neutral	Agree
56	30	20	20	25	30	30	15	15	20	25	Neutral	Agree	Agree	Strongly Agree	Agree
57	25	30	20	25	20	25	15	10	20	15	Neutral	Neutral	Neutral	Agree	Agree
58	15	15	25	15	30	25	35	30	35	30	Agree	Agree	Agree	Agree	Neutral
59	15	20	20	25	40	25	30	25	25	25	Neutral	Neutral	Agree	Agree	Agree
60	20	25	15	20	25	30	20	30	35	25	Agree	Agree	Neutral	Neutral	Neutral
61	30	20	30	20	20	20	20	20	20	20	Agree	Neutral	Neutral	Neutral	Agree
62	20	20	25	20	20	20	20	25	20	25	Agree	Neutral	Neutral	Agree	Strongly Agree
63	20	25	20	20	25	20	20	20	20	20	Agree	Neutral	Neutral	Agree	Neutral
64	10	10	10	20	15	30	20	20	25	20	Neutral	Neutral	Neutral	Agree	Agree
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67	25	25	20	25	25	25	25	25	20	25	Neutral	Neutral	Agree	Neutral	Neutral
68	15	20	10	25	20	25	20	20	25	20	Strongly Agree	Strongly Agree	Agree	Agree	Strongly Agree
69	18	18	14	10	52	50	40	45	40	45	Neutral	Agree	Agree	Neutral	Agree
70	20	10	10	15	20	10	30	35	20	30	Agree	Neutral	Neutral	Agree	Neutral
71	15	30	25	20	20	20	15	20	25	30	Neutral	Neutral	Agree	Agree	Neutral
72	30	25	20	15	15	25	20	25	25	30	Agree	Agree	Disagree	Disagree	Agree
73	30	25	35	30	20	35	35	25	30	25	Agree	Agree	Neutral	Neutral	Neutral
74	30	20	30	25	25	40	40	30	35	40	Neutral	Neutral	Neutral	Agree	Neutral
75	25	20	10	10	25	30	20	30	20	35	Strongly Agree	Agree	Agree	Strongly Agree	Strongly Agree
76	35	25	15	15	15	15	25	25	25	25	Agree	Neutral	Neutral	Strongly Agree	Neutral

No.	MC3	MC4	MC5	MC6	HC1	HC2	HC3	HC4	HC5	HC6	PU1	PU2	PU3	PU4	PU5
77	15	20	15	25	25	15	25	20	15	20	Agree	Neutral	Agree	Neutral	Agree
78	40	30	30	25	30	15	15	30	25	20	Agree	Neutral	Strongly Agree	Agree	Neutral
79	10	10	10	20	20	35	20	30	25	20	Agree	Agree	Agree	Agree	Agree
80	30	20	20	20	15	20	10	20	20	20	Agree	Agree	Agree	Agree	Disagree
81	30	20	30	25	15	20	20	30	20	20	Neutral	Agree	Neutral	Agree	Neutral
82	25	25	25	25	30	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Agree
83	20	20	10	20	20	30	30	20	15	30	Agree	Agree	Neutral	Neutral	Agree
84	25	10	25	20	30	30	25	15	20	20	Neutral	Neutral	Neutral	Strongly Agree	Neutral
85	25	10	25	20	25	35	25	20	20	20	Neutral	Strongly Agree	Neutral	Neutral	Neutral
86	25	20	20	25	20	20	30	25	25	20	Neutral	Neutral	Strongly Agree	Neutral	Disagree
87	20	15	20	15	20	15	10	15	25	25	Neutral	Neutral	Neutral	Neutral	Strongly Agree
88	35	20	20	20	25	35	25	10	15	35	Neutral	Neutral	Agree	Neutral	Neutral
89	10	20	30	20	10	20	10	10	10	25	Neutral	Agree	Agree	Agree	Agree
90	35	20	15	20	15	20	20	10	15	15	Agree	Agree	Agree	Agree	Agree
91	25	25	30	20	40	25	25	25	20	30	Neutral	Agree	Strongly Agree	Neutral	Neutral
92	20	15	20	15	25	15	10	15	15	25	Strongly Agree	Strongly Agree	Strongly Agree	Neutral	Strongly Agree
93	10	25	35	20	35	25	40	25	20	45	Agree	Neutral	Neutral	Strongly Agree	Strongly Agree
94	35	30	30	25	30	30	20	20	20	25	Neutral	Agree	Agree	Agree	Neutral
95	20	25	25	20	25	30	20	20	25	30	Agree	Neutral	Agree	Agree	Agree
96	10	20	25	20	30	25	40	30	40	30	Agree	Agree	Neutral	Neutral	Neutral
97	30	10	10	20	20	30	20	30	20	20	Agree	Strongly Agree	Neutral	Agree	Agree
98	10	20	25	20	25	20	10	30	30	15	Agree	Agree	Agree	Agree	Agree
99	20	20	20	30	20	10	15	20	25	15	Strongly Agree	Neutral	Neutral	Neutral	Strongly Agree
100	25	25	25	25	25	25	25	25	35	25	Strongly Agree	Neutral	Strongly Agree	Agree	Neutral
101	20	25	25	25	25	30	30	25	25	25	Neutral	Neutral	Agree	Neutral	Agree
102	20	10	20	20	30	20	15	20	15	20	Neutral	Agree	Neutral	Neutral	Agree
103	20	10	20	15	25	20	35	30	10	30	Neutral	Disagree	Disagree	Disagree	Agree
104	20	20	20	10	20	35	35	35	35	30	Agree	Neutral	Agree	Neutral	Neutral
105	20	30	15	20	35	35	40	35	30	25	Neutral	Agree	Strongly Agree	Agree	Agree
106	20	20	25	15	15	25	15	25	20	20	Neutral	Agree	Neutral	Neutral	Agree
107	20	25	25	15	20	25	30	25	20	20	Agree	Neutral	Agree	Agree	Agree
108	15	25	20	15	20	30	15	25	25	20	Neutral	Neutral	Agree	Agree	Neutral
109	20	25	20	20	20	40	30	25	30	25	Neutral	Neutral	Neutral	Neutral	Agree
110	25	25	30	25	20	40	20	25	30	25	Agree	Strongly Agree	Neutral	Strongly Agree	Agree
111	10	10	20	10	20	20	30	10	20	20	Agree	Agree	Neutral	Strongly Agree	Agree
112	20	20	25	25	20	30	35	20	30	30	Neutral	Neutral	Agree	Neutral	Agree
113	30	20	15	20	20	25	20	35	20	25	Neutral	Neutral	Strongly Agree	Agree	Agree
114	25	20	25	20	25	25	25	30	25	25	Neutral	Disagree	Neutral	Disagree	Neutral
115	15	20	25	15	15	35	35	20	25	25	Agree	Agree	Neutral	Disagree	Agree
116	25	25	25	25	25	25	25	25	25	25	Agree	Agree	Agree	Strongly Agree	Neutral
117	15	20	20	10	20	35	35	20	30	25	Neutral	Agree	Agree	Agree	Agree
118	20	30	20	10	15	15	15	35	35	20	Agree	Neutral	Agree	Neutral	Neutral
119	15	15	25	20	35	25	25	25	20	20	Neutral	Neutral	Strongly Agree	Agree	Agree
120	20	25	25	10	25	30	20	20	25	25	Agree	Agree	Agree	Agree	Agree
121	20	20	25	10	20	20	25	40	25	30	Agree	Neutral	Neutral	Agree	Neutral
122	20	15	25	15	35	35	40	30	35	35	Agree	Neutral	Strongly Agree	Agree	Agree
123	25	20	25	20	25	25	25	20	20	25	Neutral	Agree	Neutral	Neutral	Neutral
124	20	10	10	10	25	20	20	20	20	20	Agree	Neutral	Neutral	Neutral	Neutral
125	20	35	25	20	20	20	30	15	10	20	Neutral	Agree	Neutral	Disagree	Disagree
126	30	25	30	30	20	25	30	25	20	20	Agree	Agree	Neutral	Neutral	Strongly Agree
127	20	30	15	10	25	20	25	30	25	25	Neutral	Strongly Agree	Strongly Agree	Neutral	Agree
128	30	20	20	20	25	35	25	25	35	35	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Agree
129	30	20	20	20	30	35	25	25	35	35	Agree	Neutral	Agree	Agree	Agree
130	20	25	30	25	20	30	20	30	20	20	Agree	Agree	Agree	Agree	Agree
131	15	20	30	15	30	20	25	40	30	25	Agree	Neutral	Agree	Agree	Agree
132	25	30	30	20	30	40	30	30	25	25	Neutral	Agree	Neutral	Neutral	Agree
133	25	20	20	30	35	25	25	20	10	20	Agree	Neutral	Strongly Agree	Agree	Agree
134	30	30	25	15	30	40	35	30	30	45	Neutral	Neutral	Neutral	Disagree	Disagree
135	30	20	20	15	30	30	20	30	30	30	Neutral	Agree	Agree	Agree	Agree
136	30	15	25	25	15	30	15	25	20	30	Neutral	Agree	Strongly Agree	Strongly Agree	Agree
137	20	25	30	25	20	40	40	25	30	25	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Agree
138	20	20	20	15	40	20	20	25	40	40	Agree	Agree	Strongly Agree	Agree	Agree
139	35	30	30	25	30	35	25	30	25	30	Agree	Strongly Agree	Agree	Agree	Agree
140	25	25	25	25	25	20	25	25	25	25	Strongly Agree	Agree	Agree	Agree	Agree
141	30	15	20	20	20	20	30	35	25	25	Neutral	Agree	Strongly Agree	Neutral	Strongly Agree
142	30	25	30	25	35	25	30	25	25	25	Neutral	Neutral	Strongly Agree	Agree	Agree
143	20	15	20	15	20	15	35	15	20	25	Agree	Neutral	Agree	Neutral	Neutral
144	25	25	25	25	20	25	25	30	25	30	Agree	Agree	Neutral	Strongly Agree	Strongly Agree
145	25	35	20	15	30	25	25	25	35	30	Neutral	Agree	Neutral	Neutral	Neutral
146	20	30	30	20	25	30	30	30	25	25	Agree	Agree	Strongly Agree	Neutral	Neutral
147	20	25	30	20	15	25	25	30	25	20	Agree	Strongly Agree	Neutral	Strongly Agree	Strongly Agree
148	25	25	30	20	20	30	25	20	35	45	Neutral	Agree	Strongly Agree	Strongly Agree	Strongly Agree
149	20	30	25	25	25	30	20	30	25	25	Neutral	Agree	Neutral	Neutral	Agree
150	30	25	25	25	30	30	35	20	20	20	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Agree
151	20	30	20	25	20	25	25	35	25	30	Agree	Disagree	Neutral	Agree	Agree
152	20	10	20	20	25	30	20	30	25	25	Agree	Agree	Neutral	Neutral	Neutral

No.	MC3	MC4	MC5	MC6	HC1	HC2	HC3	HC4	HC5	HC6	PU1	PU2	PU3	PU4	PU5
153	25	25	30	20	10	15	15	15	5	25	Neutral	Strongly Agree	Agree	Strongly Agree	Strongly Agree
154	30	25	20	25	30	20	30	30	20	25	Agree	Agree	Neutral	Agree	Agree
155	20	30	20	25	30	35	30	25	25	25	Strongly Agree	Strongly Agree	Neutral	Strongly Agree	Disagree
156	15	25	25	25	25	25	25	20	20	30	Neutral	Agree	Agree	Agree	Agree
157	20	20	25	30	20	35	25	25	30	20	Agree	Strongly Agree	Strongly Agree	Neutral	Strongly Agree
158	30	20	20	20	25	35	25	25	35	35	Strongly Agree	Neutral	Agree	Neutral	Strongly Agree
159	20	25	25	25	20	25	30	25	25	20	Agree	Neutral	Neutral	Neutral	Agree
160	25	30	30	25	25	30	25	30	35	35	Strongly Agree	Agree	Neutral	Agree	Neutral
161	15	25	25	20	30	35	30	45	35	30	Neutral	Agree	Neutral	Agree	Neutral
162	30	25	30	25	30	30	25	25	25	25	Agree	Strongly Agree	Neutral	Strongly Agree	Agree
163	10	30	25	25	35	35	30	25	20	25	Agree	Neutral	Agree	Neutral	Agree
164	10	30	25	25	35	35	30	25	20	25	Neutral	Strongly Agree	Neutral	Disagree	Neutral
165	20	30	30	25	25	30	30	20	20	25	Agree	Neutral	Agree	Neutral	Strongly Agree
166	25	30	20	25	25	25	25	35	25	30	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Agree
167	40	20	25	20	25	30	20	40	35	35	Neutral	Agree	Agree	Agree	Agree
168	30	30	25	15	40	30	30	35	35	35	Neutral	Neutral	Agree	Agree	Agree
169	30	15	15	15	25	30	20	35	30	25	Agree	Agree	Neutral	Neutral	Neutral
170	20	30	30	20	25	30	30	20	20	30	Agree	Neutral	Agree	Agree	Agree
171	30	30	40	20	20	35	30	20	30	30	Neutral	Agree	Neutral	Agree	Neutral
172	30	35	30	20	35	35	30	25	40	45	Agree	Neutral	Neutral	Neutral	Neutral
173	15	25	20	10	50	45	35	40	35	40	Neutral	Neutral	Neutral	Agree	Neutral
174	35	30	35	25	30	25	20	25	15	30	Neutral	Agree	Neutral	Neutral	Agree
175	25	25	20	25	25	25	25	25	10	25	Strongly Agree	Agree	Agree	Neutral	Neutral
176	35	35	20	20	30	35	35	30	40	30	Neutral	Agree	Strongly Agree	Strongly Agree	Agree
177	35	35	20	30	30	35	35	30	40	25	Neutral	Strongly Agree	Agree	Agree	Agree
178	35	35	20	15	30	35	35	30	40	40	Agree	Neutral	Strongly Agree	Agree	Strongly Agree
179	20	30	20	20	30	30	30	35	45	30	Agree	Strongly Agree	Agree	Neutral	Agree
180	35	35	40	30	35	35	35	30	20	20	Neutral	Agree	Neutral	Agree	Neutral
181	25	30	30	25	25	30	30	30	30	25	Neutral	Agree	Neutral	Strongly Agree	Agree
182	25	15	25	25	25	15	25	25	25	30	Agree	Agree	Agree	Strongly Agree	Agree
183	35	35	20	25	30	35	35	30	40	30	Agree	Neutral	Strongly Agree	Agree	Agree
184	20	30	10	25	30	25	35	30	35	25	Strongly Agree	Agree	Strongly Agree	Agree	Agree
185	25	15	30	25	30	25	25	35	30	25	Disagree	Agree	Neutral	Neutral	Neutral
186	25	15	30	25	30	25	25	35	30	25	Neutral	Neutral	Agree	Agree	Agree
187	25	25	30	25	30	25	25	25	35	25	Agree	Agree	Neutral	Disagree	Agree
188	25	25	25	25	35	25	25	25	25	25	Agree	Agree	Strongly Agree	Agree	Strongly Agree
189	25	25	25	25	25	25	25	25	25	25	Neutral	Neutral	Disagree	Neutral	Neutral
190	25	25	25	25	25	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Neutral
191	25	25	25	25	30	25	25	25	25	25	Neutral	Agree	Strongly Agree	Neutral	Neutral
192	25	25	25	25	35	25	25	25	25	25	Neutral	Agree	Neutral	Strongly Agree	Agree
193	25	25	25	25	25	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Neutral
194	25	25	25	25	35	25	25	25	25	25	Neutral	Agree	Neutral	Strongly Agree	Neutral
195	25	25	25	25	25	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Agree
196	25	25	25	25	30	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Agree
197	25	25	25	25	30	25	25	25	25	25	Agree	Agree	Agree	Neutral	Agree
198	25	25	25	25	30	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Neutral
199	25	25	25	25	25	25	25	25	25	25	Agree	Agree	Agree	Agree	Agree
200	25	25	25	25	25	25	25	25	25	25	Agree	Agree	Agree	Agree	Agree
201	25	15	30	25	25	25	25	35	30	25	Agree	Neutral	Neutral	Agree	Neutral
202	25	15	30	25	25	25	25	35	30	25	Agree	Agree	Agree	Neutral	Agree
203	25	15	30	25	25	25	25	35	25	25	Neutral	Neutral	Disagree	Neutral	Neutral
204	25	15	30	25	25	25	25	35	25	25	Agree	Agree	Neutral	Neutral	Neutral
205	25	25	25	25	25	25	25	25	25	25	Neutral	Neutral	Neutral	Neutral	Strongly Agree
206	25	25	25	25	25	25	25	25	25	25	Neutral	Agree	Neutral	Neutral	Agree
207	25	25	25	25	25	25	25	25	25	25	Agree	Neutral	Neutral	Agree	Neutral
208	25	25	25	25	25	25	25	25	25	25	Agree	Neutral	Neutral	Agree	Agree
209	25	25	25	25	25	25	25	25	25	25	Neutral	Strongly Agree	Neutral	Neutral	Neutral
210	25	25	25	25	25	25	25	25	25	25	Agree	Agree	Neutral	Agree	Strongly Agree
211	25	25	25	25	25	25	25	25	25	25	Neutral	Neutral	Agree	Agree	Agree
212	25	25	25	25	35	25	25	25	25	25	Agree	Agree	Neutral	Agree	Agree
213	25	25	25	25	30	25	25	25	25	25	Agree	Neutral	Disagree	Disagree	Disagree
214	25	25	25	25	35	25	25	25	25	25	Agree	Agree	Neutral	Strongly Agree	Agree
215	25	25	25	25	35	25	25	25	25	25	Disagree	Agree	Agree	Disagree	Agree
216	25	25	25	25	25	25	25	25	25	25	Strongly Agree	Neutral	Agree	Agree	Strongly Agree
217	25	25	25	25	25	25	25	25	25	25	Neutral	Neutral	Disagree	Disagree	Disagree
218	35	35	20	25	35	35	35	30	40	20	Agree	Agree	Neutral	Agree	Neutral
219	35	35	20	25	30	35	35	30	40	25	Strongly Agree	Strongly Agree	Agree	Neutral	Neutral
220	35	35	20	15	35	35	35	30	40	35	Neutral	Agree	Neutral	Strongly Agree	Strongly Agree
221	35	35	20	25	30	35	35	30	40	20	Agree	Strongly Agree	Agree	Disagree	Disagree
222	35	35	20	20	25	35	35	30	40	30	Agree	Neutral	Agree	Neutral	Neutral
223	35	35	20	25	35	35	35	30	40	20	Neutral	Agree	Agree	Neutral	Neutral
224	35	30	20	15	25	35	35	30	40	30	Agree	Neutral	Agree	Agree	Agree
225	35	35	20	25	35	35	35	30	40	25	Neutral	Neutral	Neutral	Neutral	Agree
226	35	35	20	20	25	35	35	30	40	30	Agree	Agree	Agree	Strongly Agree	Strongly Agree

[illegible]

[illegible]







[illegible]



**Explore: Cultures****Type****Case Processing Summary**

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Culture	Clan	226	100.0%	0	0.0%	226	100.0%
	Adhocracy	226	100.0%	0	0.0%	226	100.0%
	Market	226	100.0%	0	0.0%	226	100.0%
	Hierarchy	226	100.0%	0	0.0%	226	100.0%

**Descriptives**

Type				Statistic	Std. Error
Culture	Clan	Mean		26.1163	.32908
		95% Confidence Interval for Mean		25.4679	
		Lower Bound		26.7648	
		Upper Bound			
		5% Trimmed Mean		26.0462	
		Median		25.2100	
		Variance		24.475	
		Std. Deviation		4.94719	
		Minimum		14.86	
		Maximum		44.22	
		Range		29.36	
		Interquartile Range		4.55	
		Skewness		.410	.162
		Kurtosis		.963	.322
	Adhocracy	Mean		23.4351	.23010
		95% Confidence Interval for Mean		22.9817	
		Lower Bound		23.8885	
		Upper Bound			
		5% Trimmed Mean		23.3967	
		Median		24.1700	
		Variance		11.966	
		Std. Deviation		3.45912	
		Minimum		15.83	
		Maximum		35.00	
		Range		19.17	
		Interquartile Range		5.00	
		Skewness		.008	.162
		Kurtosis		-.023	.322
	Market	Mean		22.6189	.27089
		95% Confidence Interval for Mean		22.0851	
		Lower Bound		23.1527	
		Upper Bound			
		5% Trimmed Mean		22.6579	
		Median		23.3300	
		Variance		16.584	
		Std. Deviation		4.07236	
		Minimum		10.83	
		Maximum		33.33	

### Descriptives

Type		Statistic	Std. Error
Hierarchy	Range	22.50	
	Interquartile Range	5.00	
	Skewness	-.250	.162
	Kurtosis	-.028	.322
	Mean	26.0559	.32168
	95% Confidence Interval for Mean	Lower Bound	25.4220
		Upper Bound	26.6898
	5% Trimmed Mean	25.9671	
	Median	25.8300	
	Variance	23.386	
	Std. Deviation	4.83595	
	Minimum	14.17	
	Maximum	45.33	
	Range	31.16	
	Interquartile Range	5.00	
	Skewness	.451	.162
	Kurtosis	1.192	.322

### Tests of Normality

Type		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Culture	Clan	.095	226	.000	.974	226	.000
	Adhocracy	.129	226	.000	.971	226	.000
	Market	.127	226	.000	.982	226	.006
	Hierarchy	.093	226	.000	.978	226	.001

a. Lilliefors Significance Correction

## Explore: PMS Perceived importance and use of PMS

### Variable

**Case Processing Summary**

Variable		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Financial	Perceived importance	226	100.0%	0	0.0%	226	100.0%
	Use	226	100.0%	0	0.0%	226	100.0%
Customer	Perceived importance	226	100.0%	0	0.0%	226	100.0%
	Use	226	100.0%	0	0.0%	226	100.0%
Innovation	Perceived importance	226	100.0%	0	0.0%	226	100.0%
	Use	226	100.0%	0	0.0%	226	100.0%
Employee	Perceived importance	226	100.0%	0	0.0%	226	100.0%
	Use	226	100.0%	0	0.0%	226	100.0%
Quality	Perceived importance	226	100.0%	0	0.0%	226	100.0%
	Use	226	100.0%	0	0.0%	226	100.0%
Community	Perceived importance	226	100.0%	0	0.0%	226	100.0%
	Use	226	100.0%	0	0.0%	226	100.0%

**Descriptives**

Variable			Statistic	Std. Error
Financial	Perceived importance	Mean	3.97	.046
		95% Confidence Interval for Mean	Lower Bound	3.88
			Upper Bound	4.07
		5% Trimmed Mean	3.97	
		Median	4.00	
		Variance	.488	
		Std. Deviation	.699	
		Minimum	3	
		Maximum	5	
		Range	2	
		Interquartile Range	1	
		Skewness	.036	.162
		Kurtosis	-.937	.322
	Use	Mean	3.52	.062
		95% Confidence Interval for Mean	Lower Bound	3.40
			Upper Bound	3.64
		5% Trimmed Mean	3.52	
		Median	4.00	
		Variance	.855	
		Std. Deviation	.925	
		Minimum	2	
		Maximum	5	
		Range	3	
		Interquartile Range	1	
		Skewness	-.052	.162
		Kurtosis	-.829	.322
Customer	Perceived importance	Mean	4.24	.043

### Descriptives

Variable			Statistic	Std. Error
Use		95% Confidence Interval for Mean	Lower Bound	4.16
			Upper Bound	4.33
		5% Trimmed Mean		4.27
		Median		4.00
		Variance		.416
		Std. Deviation		.645
		Minimum		3
		Maximum		5
		Range		2
		Interquartile Range		1
		Skewness		-.277
		Kurtosis		-.691
		Mean		3.67
		95% Confidence Interval for Mean	Lower Bound	3.55
			Upper Bound	3.78
		5% Trimmed Mean		3.69
		Median		4.00
		Variance		.783
		Std. Deviation		.885
		Minimum		2
		Maximum		5
Innovation	Perceived importance	Range		3
		Interquartile Range		1
		Skewness		-.268
		Kurtosis		-.605
		Mean		3.96
		95% Confidence Interval for Mean	Lower Bound	3.84
			Upper Bound	4.08
		5% Trimmed Mean		3.97
		Median		4.00
		Variance		.838
		Std. Deviation		.916
		Minimum		2
		Maximum		5
		Range		3
		Interquartile Range		2
		Skewness		-.026
		Kurtosis		-1.596
		Mean		3.17
		95% Confidence Interval for Mean	Lower Bound	3.05
			Upper Bound	3.29
Use		5% Trimmed Mean		3.13
		Median		3.00
		Variance		.807
		Std. Deviation		.898
		Minimum		2
		Maximum		5

### Descriptives

Variable		Statistic	Std. Error
Employee	Perceived importance	Range	3
		Interquartile Range	2
		Skewness	.293
		Kurtosis	-.734
		Mean	3.85
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	3.83
		Median	4.00
		Variance	.700
		Std. Deviation	.837
		Minimum	3
		Maximum	5
		Range	2
		Interquartile Range	2
		Skewness	.299
		Kurtosis	-1.511
	Use	Mean	3.50
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	3.50
		Median	3.00
		Variance	.651
		Std. Deviation	.807
		Minimum	2
		Maximum	5
		Range	3
		Interquartile Range	1
Quality	Perceived importance	Skewness	.128
		Kurtosis	-.466
		Mean	3.98
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	3.98
		Median	4.00
		Variance	.462
		Std. Deviation	.680
		Minimum	3
		Maximum	5
	Use	Range	2
		Interquartile Range	0
		Skewness	.022
		Kurtosis	-.817
		Mean	3.66
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	3.68



### Descriptives

Variable			Statistic	Std. Error
Community	Perceived importance	Median	4.00	
		Variance	.759	
		Std. Deviation	.871	
		Minimum	2	
		Maximum	5	
		Range	3	
		Interquartile Range	1	
		Skewness	-.173	.162
		Kurtosis	-.630	.322
		Mean	3.63	.051
		95% Confidence Interval for Mean	Lower Bound	3.53
			Upper Bound	3.73
		5% Trimmed Mean	3.59	
		Median	3.00	
		Variance	.599	
		Std. Deviation	.774	
		Minimum	2	
		Maximum	5	
		Range	3	
		Interquartile Range	1	
		Skewness	.695	.162
		Kurtosis	-.892	.322
	Use	Mean	3.56	.061
		95% Confidence Interval for Mean	Lower Bound	3.44
			Upper Bound	3.68
		5% Trimmed Mean	3.56	
		Median	4.00	
		Variance	.852	
		Std. Deviation	.923	
		Minimum	2	
		Maximum	5	
		Range	3	
		Interquartile Range	1	
		Skewness	-.102	.162
		Kurtosis	-.813	.322

### Tests of Normality

Variable		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Financial	Perceived importance	.259	226	.000	.806	226	.000
	Use	.217	226	.000	.880	226	.000
Customer	Perceived importance	.289	226	.000	.778	226	.000
	Use	.257	226	.000	.870	226	.000
Innovation	Perceived importance	.264	226	.000	.777	226	.000
	Use	.225	226	.000	.866	226	.000
Employee	Perceived importance	.282	226	.000	.769	226	.000
	Use	.254	226	.000	.862	226	.000
Quality	Perceived importance	.271	226	.000	.801	226	.000
	Use	.241	226	.000	.873	226	.000
Community	Perceived importance	.336	226	.000	.751	226	.000
	Use	.224	226	.000	.879	226	.000

a. Lilliefors Significance Correction

## Explore

### Acceptance items

**Case Processing Summary**

Acceptance items		Cases				
		Valid		Missing		Total
		N	Percent	N	Percent	N
PMS Acceptance	Acceptance of financial measures	226	100.0%	0	0.0%	226
	Acceptance of non-financial measures	226	100.0%	0	0.0%	226
	Acceptance of advanced techniques	226	100.0%	0	0.0%	226
	Perceived effectiveness of PMS	226	100.0%	0	0.0%	226
	Perceived usefull of PMS	226	100.0%	0	0.0%	226

**Case Processing Summary**

Acceptance items		Cases
		Total
		Percent
PMS Acceptance	Acceptance of financial measures	100.0%
	Acceptance of non-financial measures	100.0%
	Acceptance of advanced techniques	100.0%
	Perceived effectiveness of PMS	100.0%
	Perceived usefull of PMS	100.0%

**Descriptives**

Acceptance items		
PMS Acceptance	Acceptance of financial measures	Mean
		95% Confidence Interval for Mean
		Lower Bound
		Upper Bound
		5% Trimmed Mean
		Median
		Variance
		Std. Deviation
		Minimum
		Maximum
		Range
		Interquartile Range
		Skewness
		Kurtosis
	Acceptance of non-financial measures	Mean
		95% Confidence Interval for Mean
		Lower Bound
		Upper Bound
		5% Trimmed Mean
		Median
		Variance
		Std. Deviation
		Minimum
		Maximum
		Range
		Interquartile Range

### Descriptives

Acceptance items			Statistic
PMS Acceptance	Acceptance of financial measures	Mean	3.66
		95% Confidence Interval for Mean	
		Lower Bound	3.57
		Upper Bound	3.75
		5% Trimmed Mean	3.64
		Median	4.00
		Variance	.430
		Std. Deviation	.656
		Minimum	2
		Maximum	5
		Range	3
		Interquartile Range	1
		Skewness	.204
		Kurtosis	-.423
	Acceptance of non-financial measures	Mean	3.73
		95% Confidence Interval for Mean	
		Lower Bound	3.64
		Upper Bound	3.82
		5% Trimmed Mean	3.71
		Median	4.00
		Variance	.476
		Std. Deviation	.690
		Minimum	2
		Maximum	5
		Range	3
		Interquartile Range	1

### Descriptives

Acceptance items			Std. Error
PMS Acceptance	Acceptance of financial measures	Mean	.044
		95% Confidence Interval for Mean	
		Lower Bound	
		Upper Bound	
		5% Trimmed Mean	
		Median	
		Variance	
		Std. Deviation	
		Minimum	
		Maximum	
		Range	
		Interquartile Range	
		Skewness	.162
		Kurtosis	.322
	Acceptance of non-financial measures	Mean	.046
		95% Confidence Interval for Mean	
		Lower Bound	
		Upper Bound	
		5% Trimmed Mean	
		Median	
		Variance	
		Std. Deviation	
		Minimum	
		Maximum	
		Range	
		Interquartile Range	

## Descriptives

Acceptance items		
Acceptance of advanced techniques	Skewness	
	Kurtosis	
	Mean	
	95% Confidence Interval for Mean	Lower Bound Upper Bound
	5% Trimmed Mean	
	Median	
	Variance	
	Std. Deviation	
	Minimum	
	Maximum	
	Range	
	Interquartile Range	
	Skewness	
	Kurtosis	
Perceived effectiveness of PMS	Mean	
	95% Confidence Interval for Mean	Lower Bound Upper Bound
	5% Trimmed Mean	
	Median	
	Variance	
	Std. Deviation	
	Minimum	
	Maximum	
	Range	
	Interquartile Range	
	Skewness	
	Kurtosis	
Perceived usefull of PMS	Mean	
	95% Confidence Interval for Mean	Lower Bound Upper Bound
	5% Trimmed Mean	
	Median	
	Variance	
	Std. Deviation	
	Minimum	
	Maximum	
	Range	
	Interquartile Range	
	Skewness	
	Kurtosis	

### Descriptives

Acceptance items			Statistic
Acceptance of advanced techniques	Skewness		.174
	Kurtosis		-.530
	Mean		3.62
	95% Confidence Interval for Mean	Lower Bound	3.53
		Upper Bound	3.72
	5% Trimmed Mean		3.61
	Median		4.00
	Variance		.565
	Std. Deviation		.751
	Minimum		2
	Maximum		5
	Range		3
	Interquartile Range		1
	Skewness		.363
	Kurtosis		-.601
Perceived effectiveness of PMS	Mean		3.70
	95% Confidence Interval for Mean	Lower Bound	3.59
		Upper Bound	3.80
	5% Trimmed Mean		3.72
	Median		4.00
	Variance		.647
	Std. Deviation		.804
	Minimum		2
	Maximum		5
	Range		3
	Interquartile Range		1
	Skewness		-.073
	Kurtosis		-.521
Perceived usefull of PMS	Mean		3.69
	95% Confidence Interval for Mean	Lower Bound	3.59
		Upper Bound	3.79
	5% Trimmed Mean		3.71
	Median		4.00
	Variance		.561
	Std. Deviation		.749
	Minimum		2
	Maximum		5
	Range		3
	Interquartile Range		1
	Skewness		-.063
	Kurtosis		-.348

### Descriptives

Acceptance items			Std. Error
Acceptance of advanced techniques	Skewness		.162
	Kurtosis		.322
	Mean		.050
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.162
	Kurtosis		.322
Perceived effectiveness of PMS	Mean		.053
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.162
	Kurtosis		.322
Perceived usefull of PMS	Mean		.050
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.162
	Kurtosis		.322



### Tests of Normality

		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
PMS Acceptance	Acceptance of financial measures	.282	226	.000	.798	226
	Acceptance of non-financial measures	.270	226	.000	.815	226
	Acceptance of advanced techniques	.284	226	.000	.822	226
	Perceived effectiveness of PMS	.243	226	.000	.861	226
	Perceived usefull of PMS	.267	226	.000	.846	226

### Tests of Normality

		Shapiro-...
Acceptance items		Sig.
PMS Acceptance	Acceptance of financial measures	.000
	Acceptance of non-financial measures	.000
	Acceptance of advanced techniques	.000
	Perceived effectiveness of PMS	.000
	Perceived usefull of PMS	.000

a. Lilliefors Significance Correction

## NPar Tests

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
DominantCharacteristics	904	25.00	6.159	10	52
OrganizationalLeadership	904	25.00	7.053	10	50
ManagementofEmployee	904	25.00	7.464	10	50
OrganizationalGlue	904	25.00	7.662	5	60
StrategicEmphases	904	25.00	7.333	5	55
SuccessCriteria	904	25.00	6.697	10	50
Type	904	2.50	1.119	1	4

## Kruskal-Wallis Test

### Ranks

	Type	N	Mean Rank
DominantCharacteristics	Clan	226	516.87
	Adhocracy	226	428.83
	Market	226	380.67
	Hierarchy	226	483.63
	Total	904	
OrganizationalLeadership	Clan	226	514.01
	Adhocracy	226	382.35
	Market	226	380.12
	Hierarchy	226	533.52
	Total	904	
ManagementofEmployee	Clan	226	518.82
	Adhocracy	226	410.38
	Market	226	385.19
	Hierarchy	226	495.61
	Total	904	
OrganizationalGlue	Clan	226	504.77
	Adhocracy	226	421.55
	Market	226	396.46
	Hierarchy	226	487.22
	Total	904	
StrategicEmphases	Clan	226	538.01
	Adhocracy	226	383.72

### Ranks

	Type	N	Mean Rank
	Market	226	390.52
	Hierarchy	226	497.75
	Total	904	
SuccessCriteria	Clan	226	639.84
	Adhocracy	226	370.48
	Market	226	310.78
	Hierarchy	226	488.90
	Total	904	

### Test Statistics<sup>a,b</sup>

	DominantCharacteristics	OrganizationalLeadership	ManagementofEmployee	OrganizationalGlue
Kruskal-Wallis H	39.016	73.120	44.110	28.623
df	3	3	3	3
Asymp. Sig.	.000	.000	.000	.000

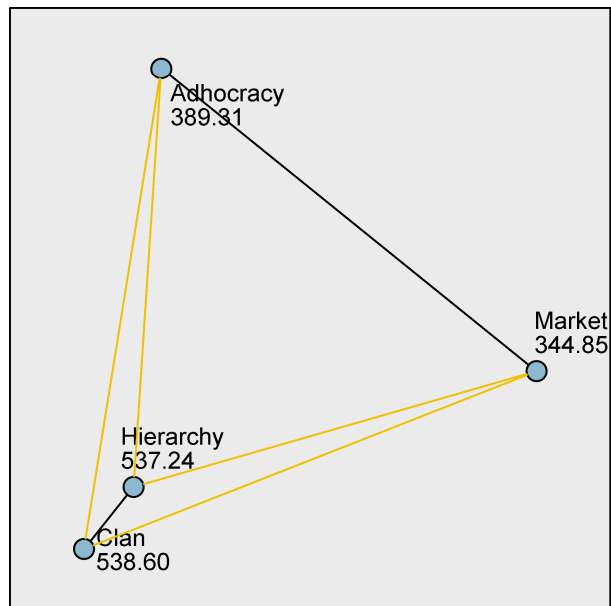
### Test Statistics<sup>a,b</sup>

	StrategicEmphases	SuccessCriteria
Kruskal-Wallis H	64.207	233.192
df	3	3
Asymp. Sig.	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Type

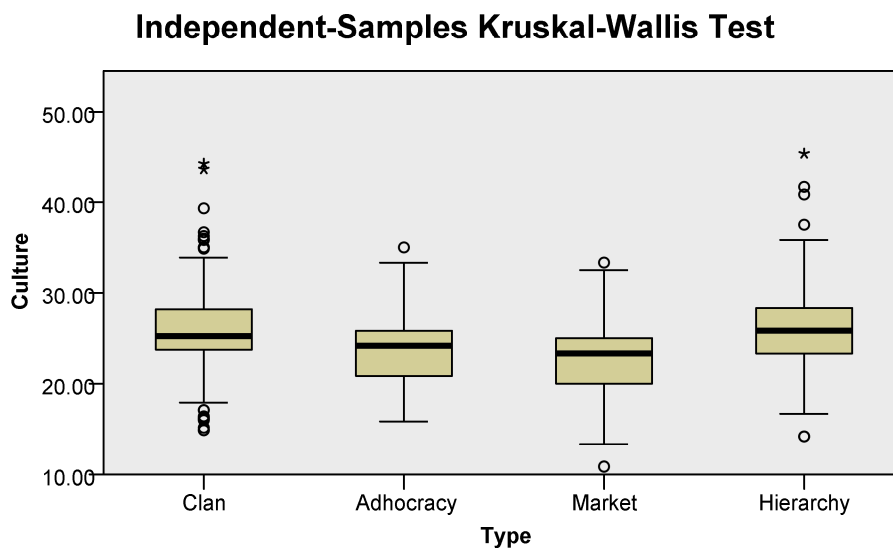
### Pairwise Comparisons of Type



Each node shows the sample average rank of Type.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Market-Hierarchy	-192.389	24.525	-7.845	.000	.000
Adhocracy-Clan	149.288	24.525	6.087	.000	.000
Adhocracy-Hierarchy	-147.923	24.525	-6.032	.000	.000
Market-Clan	193.754	24.525	7.900	.000	.000
Market-Adhocracy	44.467	24.525	1.813	.070	.419
Hierarchy-Clan	1.365	24.525	.056	.956	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05.



<b>Total N</b>	904
<b>Test Statistic</b>	100.339
<b>Degrees of Freedom</b>	3
<b>Asymptotic Sig. (2-sided test)</b>	.000

1. The test statistic is adjusted for ties.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of PMS Acceptance is the same across categories of Acceptance items.	Independent-Samples Kruskal-Wallis Test	.467	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

## NPar Tests

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
PMS Acceptance	1130	3.68	.731	2	5
Acceptance items	1130	3.00	1.415	1	5

## Kruskal-Wallis Test

### Ranks

Acceptance items		N	Mean Rank
PMS Acceptance	Acceptance of financial measures	226	557.26
	Acceptance of non-financial measures	226	583.65
	Acceptance of advanced techniques	226	536.51
	Perceived effectiveness of PMS	226	576.48
	Perceived usefull of PMS	226	573.61
	Total	1130	

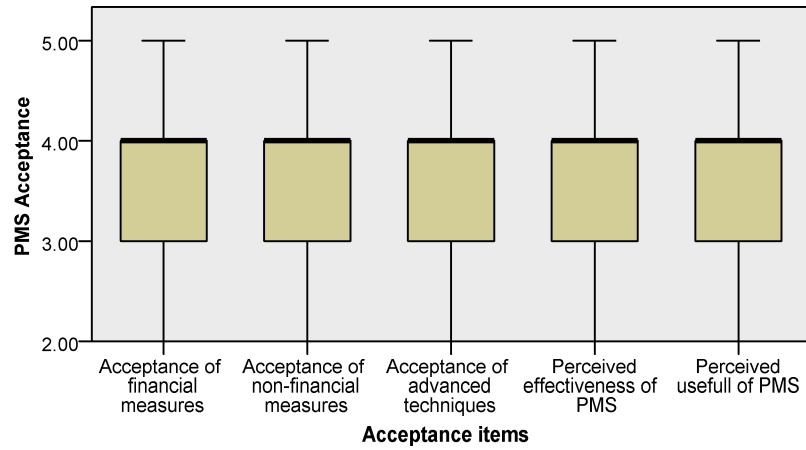
### Test Statistics<sup>a,b</sup>

	PMS Acceptance
Chi-Square	3.573
df	4
Asymp. Sig.	.467

a. Kruskal Wallis Test

b. Grouping Variable: Acceptance items

### Independent-Samples Kruskal-Wallis Test



<b>Total N</b>	1,130
<b>Test Statistic</b>	3.573
<b>Degrees of Freedom</b>	4
<b>Asymptotic Sig. (2-sided test)</b>	.467

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.



## NPar Tests

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Culture	904	24.5565	4.63305	10.83	45.33
Type	904	2.5000	1.11865	1.00	4.00

## Kruskal-Wallis Test

### Ranks

Type		N	Mean Rank
Culture	Clan	226	538.60
	Adhocracy	226	389.31
	Market	226	344.85
	Hierarchy	226	537.24
	Total	904	

### Test Statistics<sup>a,b</sup>

	Culture
Chi-Square	100.339
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: Type

## NPar Tests

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum
PMS_Importance	1356	3.94	.784	2
PMS_Use	1356	3.51	.900	2
PMS_importance_and_use_items	1356	3.50	1.708	1

### Descriptive Statistics

	Maximum
PMS_Importance	5
PMS_Use	5
PMS_importance_and_use_items	6

## Kruskal-Wallis Test

### Ranks

	PMS importance and use items	N	Mean Rank
PMS_Importance	Financial measures	226	696.39
	Customer measures	226	823.56
	Innovation measures	226	687.58
	Employee measures	226	631.65
	Quality measures	226	701.05
	Community measures	226	530.77
	Total	1356	
PMS_Use	Financial measures	226	681.25
	Customer measures	226	745.94
	Innovation measures	226	537.91
	Employee measures	226	668.33
	Quality measures	226	739.50
	Community measures	226	698.06
	Total	1356	

### Test Statistics<sup>a,b</sup>

	PMS_Importance	PMS_Use
Kruskal-Wallis H	76.705	46.689
df	5	5
Asymp. Sig.	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: PMS\_importance\_and\_use\_items

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of PMS Acceptance is the same across categories of Acceptance items.	Independent-Samples Kruskal-Wallis Test	.467	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

## NPar Tests

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
PMS Acceptance	1130	3.68	.731	2	5
Acceptance items	1130	3.00	1.415	1	5

## Kruskal-Wallis Test

### Ranks

Acceptance items		N	Mean Rank
PMS Acceptance	Acceptance of financial measures	226	557.26
	Acceptance of non-financial measures	226	583.65
	Acceptance of advanced techniques	226	536.51
	Perceived effectiveness of PMS	226	576.48
	Perceived usefull of PMS	226	573.61
	Total	1130	

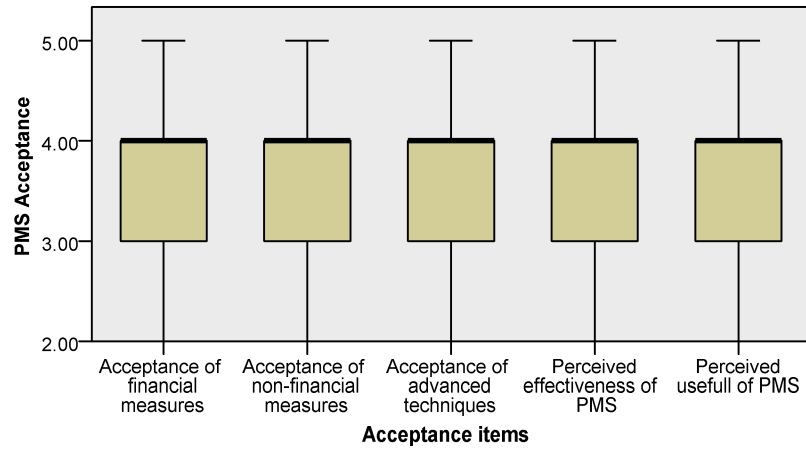
### Test Statistics<sup>a,b</sup>

	PMS Acceptance
Chi-Square	3.573
df	4
Asymp. Sig.	.467

a. Kruskal Wallis Test

b. Grouping Variable: Acceptance items

### Independent-Samples Kruskal-Wallis Test



<b>Total N</b>	1,130
<b>Test Statistic</b>	3.573
<b>Degrees of Freedom</b>	4
<b>Asymptotic Sig. (2-sided test)</b>	.467

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

## NPar Tests

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Financial	452	3.75	.850	2	5
Customer	452	3.96	.825	2	5
Innovation	452	3.56	.989	2	5
Employee	452	3.67	.839	2	5
Quality	452	3.82	.797	2	5
Community	452	3.59	.852	2	5
Variable	452	1.50	.501	1	2

## Mann-Whitney Test

### Ranks

	Variable	N	Mean Rank	Sum of Ranks
Financial	Perceived importance	226	257.19	58124.00
	Use	226	195.81	44254.00
	Total	452		
Customer	Perceived importance	226	266.85	60309.00
	Use	226	186.15	42069.00
	Total	452		
Innovation	Perceived importance	226	274.66	62073.50
	Use	226	178.34	40304.50
	Total	452		
Employee	Perceived importance	226	248.65	56194.50
	Use	226	204.35	46183.50
	Total	452		
Quality	Perceived importance	226	248.88	56247.00
	Use	226	204.12	46131.00
	Total	452		
Community	Perceived importance	226	228.07	51544.00
	Use	226	224.93	50834.00
	Total	452		

### Test Statistics<sup>a</sup>

	Financial	Customer	Innovation	Employee	Quality
Mann-Whitney U	18603.000	16418.000	14653.500	20532.500	20480.000
Wilcoxon W	44254.000	42069.000	40304.500	46183.500	46131.000
Z	-5.318	-7.082	-8.219	-3.852	-3.926
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

### Test Statistics<sup>a</sup>

	Community
Mann-Whitney U	25183.000
Wilcoxon W	50834.000
Z	-.273
Asymp. Sig. (2-tailed)	.785

a. Grouping Variable: Variable



## Outer Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.770009					
AC2		0.782059					
AC3		0.848701					
AC4		0.485364					
AC5		0.541579					
AC6		0.721169					
ACC1	0.549396						
ACC2	0.360279						
ACC3	0.670877						
ACC4	0.680672						
ACC5	0.634236						
CC1			0.785878				
CC2			0.752253				
CC3			0.825881				
CC4			0.745202				
CC5			0.742314				
CC6			0.736746				
HC1				0.741813			
HC2				0.630113			
HC3				0.73268			
HC4				0.668608			
HC5				0.753404			
HC6				0.665591			
MC1						0.566814	
MC2						0.710703	
MC3						0.741584	
MC4						0.735066	
MC5						0.525436	
MC6						0.583053	
PI1					0.621616		
PI2					0.412168		
PI3					0.165002		
PI4					0.536352		
PI5					0.571681		
PI6					0.614513		
USE1							0.133637
USE2							0.146686
USE3							0.601917
USE4							0.565438
USE5							0.442263
USE6							0.539008

## Outer Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.768913					
AC2		0.781695					
AC3		0.850294					
AC5		0.540561					
AC6		0.720206					
ACC1	0.548874						
ACC2	0.358611						
ACC3	0.672508						
ACC4	0.680781						
ACC5	0.633514						
CC1			0.785854				
CC2			0.752262				
CC3			0.825873				
CC4			0.745209				
CC5			0.742326				
CC6			0.736761				
HC1				0.741643			
HC2				0.630313			
HC3				0.732677			
HC4				0.668604			
HC5				0.753494			
HC6				0.665632			
MC1						0.566893	
MC2						0.71068	
MC3						0.741519	
MC4						0.735053	
MC5						0.5255	
MC6						0.583091	
PI1					0.622325		
PI2					0.413158		
PI3					0.165425		
PI4					0.537043		
PI5					0.571398		
PI6					0.613167		
USE1							0.134193
USE2							0.146789
USE3							0.602097
USE4							0.565737
USE5							0.442421
USE6							0.538234

## Outer Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.775796					
AC2		0.779522					
AC3		0.849806					
AC5		0.533036					
AC6		0.716247					
ACC1	0.543398						
ACC2	0.375659						
ACC3	0.666578						
ACC4	0.682045						
ACC5	0.63539						
CC1			0.785891				
CC2			0.752022				
CC3			0.826399				
CC4			0.746227				
CC5			0.741158				
CC6			0.73608				
HC1				0.741792			
HC2				0.629041			
HC3				0.730575			
HC4				0.6723			
HC5				0.754473			
HC6				0.663486			
MC1						0.568039	
MC2						0.73072	
MC3						0.760128	
MC4						0.737685	
MC6						0.5647	
PI1					0.608115		
PI2					0.411994		
PI3					0.162577		
PI4					0.561838		
PI5					0.567822		
PI6					0.613318		
USE1							0.11726
USE2							0.138276
USE3							0.580122
USE4							0.585715
USE5							0.426854
USE6							0.556775

## Outer Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.783142					
AC2		0.777841					
AC3		0.8524					
AC6		0.706657					
ACC1	0.540923						
ACC2	0.37331						
ACC3	0.667968						
ACC4	0.684636						
ACC5	0.634229						
CC1			0.785717				
CC2			0.752026				
CC3			0.82642				
CC4			0.746331				
CC5			0.741081				
CC6			0.736222				
HC1				0.741154			
HC2				0.629562			
HC3				0.730689			
HC4				0.672383			
HC5				0.754617			
HC6				0.663749			
MC1						0.568201	
MC2						0.730474	
MC3						0.760291	
MC4						0.737575	
MC6						0.564709	
PI1					0.60702		
PI2					0.411164		
PI3					0.163393		
PI4					0.567384		
PI5					0.565813		
PI6					0.611555		
USE1							0.117762
USE2							0.134189
USE3							0.581856
USE4							0.587932
USE5							0.428747
USE6							0.554814

## Outer Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.783464					
AC2		0.777166					
AC3		0.852436					
AC6		0.706904					
ACC1	0.544737						
ACC2	0.378965						
ACC3	0.668874						
ACC4	0.679145						
ACC5	0.633189						
CC1			0.785487				
CC2			0.751774				
CC3			0.826886				
CC4			0.747147				
CC5			0.740587				
CC6			0.735557				
HC1				0.740791			
HC2				0.628842			
HC3				0.729799			
HC4				0.674381			
HC5				0.755126			
HC6				0.662999			
MC1						0.55663	
MC2						0.745703	
MC3						0.780798	
MC4						0.752276	
PI1					0.601724		
PI2					0.412789		
PI3					0.15571		
PI4					0.57227		
PI5					0.57463		
PI6					0.609432		
USE1							0.112052
USE2							0.134813
USE3							0.569978
USE4							0.603578
USE5							0.421946
USE6							0.554648

## Outer Loadings

	Acceptance	Adhocracy	Clan
AC1		0.782033	
AC2		0.778611	
AC3		0.852634	
AC6		0.706889	
ACC1	0.548676		
ACC2	0.376145		
ACC3	0.660792		
ACC4	0.683889		
ACC5	0.634446		
CC1			0.785728
CC2			0.751232
CC3			0.8265
CC4			0.747314
CC5			0.740948
CC6			0.73586
HC1			
HC2			
HC3			
HC4			
HC5			
HC6			
MC2			
MC3			
MC4			
PI1			
PI2			
PI3			
PI4			
PI5			
PI6			
USE1			
USE2			
USE3			
USE4			
USE5			
USE6			

Hierarchy	Importance	Market	Use
0.743711			
0.626006			
0.72967			
0.674314			
0.753173			
0.662617			
		0.747096	
		0.824948	
		0.770407	
	0.607946		
	0.396906		
	0.145508		
	0.555426		
	0.577198		
	0.619649		
			0.130725
			0.129664
			0.571338
			0.59345
			0.422776
			0.554294

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    - Path Coefficients
    - Measurement Model
    - Latent Variable Scores (unstandardised)
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Structural Model Specification

PLS

Quality Criteria

Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
Acceptance			0.222143		0.350252	0.000836
Adhocracy	0.611973	0.862696		0.79655	0.611973	
Clan	0.585714	0.894381		0.859355	0.585714	
Hierarchy	0.555348	0.833052		0.738697	0.555348	
Importance			0.092735		0.262391	-0.005216
Market	0.611317	0.824925		0.68631	0.611317	
Use			0.255956		0.199567	-0.003504

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Redundancy

	redundancy
Acceptance	0.000836
Adhocracy	
Clan	
Hierarchy	
Importance	-0.005216
Market	
Use	-0.003504

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Cronbachs Alpha

	Cronbachs Alpha
Acceptance	
Adhocracy	0.79655
Clan	0.859355
Hierarchy	0.738697
Importance	
Market	0.68631
Use	

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Latent Variable Correlations

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
Acceptance	1						
Adhocracy	-0.062253	1					
Clan	0.089665	-0.034045	1				
Hierarchy	-0.074967	-0.386489	-0.661317	1			
Importance	0.470288	-0.112477	0.24534	-0.192872	1		
Market	-0.038361	-0.364736	-0.651798	0.342962	-0.120789	1	
Use	-0.02551	0.096341	0.407715	-0.291453	0.284796	-0.364671	1

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R Square



	R Square
Acceptance	0.222143
Adhocracy	
Clan	
Hierarchy	
Importance	0.092735
Market	
Use	0.255956

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#### Cross Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1	-0.037582	0.777174	0.116529	-0.435349	-0.003462	-0.343238	0.164697
AC2	-0.037225	0.78308	0.017884	-0.334489	-0.055169	-0.312365	0.078309
AC3	-0.076899	0.851455	-0.088336	-0.254144	-0.159143	-0.296255	0.053621
AC6	-0.022677	0.711128	-0.157197	-0.202662	-0.10507	-0.171085	-0.002949
ACC1	0.550944	0.013396	0.035352	-0.014942	0.263736	-0.043185	0.041852
ACC2	0.387492	0.082678	-0.064918	-0.022341	0.177036	0.027329	-0.039233
ACC3	0.652412	-0.153778	0.03372	0.036878	0.306133	0.040205	0.013624
ACC4	0.679008	-0.147304	0.126626	-0.085304	0.318011	-0.036142	-0.031561
ACC5	0.640995	0.097263	0.075941	-0.127139	0.302253	-0.084524	-0.06783
CC1	0.084945	-0.074314	0.786536	-0.612148	0.241112	-0.310171	0.31656
CC2	-0.012287	0.07887	0.75197	-0.478021	0.133191	-0.602357	0.29454
CC3	0.128305	-0.014749	0.825963	-0.570679	0.226978	-0.628683	0.409897
CC4	0.083493	-0.01124	0.745817	-0.49194	0.209811	-0.608967	0.280949
CC5	0.036027	0.069919	0.742129	-0.564136	0.132511	-0.420325	0.268919
CC6	0.053161	-0.200557	0.735509	-0.275026	0.147996	-0.407558	0.262046
HC1	-0.065907	-0.278062	-0.491122	0.786341	-0.228759	0.250227	-0.249606
HC3	-0.080651	-0.374951	-0.502222	0.726592	-0.056574	0.231618	-0.233409
HC4	-0.087093	-0.168107	-0.464152	0.720796	-0.174446	0.210011	-0.160666
HC5	0.022914	-0.351131	-0.529542	0.745371	-0.072617	0.349679	-0.216868
MC2	-0.007485	-0.342789	-0.470164	0.303776	-0.069112	0.751345	-0.254359
MC3	-0.02253	-0.295613	-0.492112	0.214842	-0.107515	0.820732	-0.33919
MC4	-0.061828	-0.220273	-0.577858	0.307361	-0.103124	0.771901	-0.248314
PI1	0.29445	-0.115431	0.166801	-0.121138	0.606043	-0.051997	0.121698
PI2	0.203431	-0.097536	0.103271	-0.061055	0.399514	0.018127	0.092377
PI3	0.029362	0.083216	0.190363	-0.170219	0.160152	-0.149251	0.040473
PI4	0.276996	0.023698	0.182028	-0.119562	0.523829	-0.12282	0.141218
PI5	0.325192	-0.081756	0.068269	-0.070685	0.590656	0.000979	0.143511
PI6	0.250265	-0.069782	0.122145	-0.111037	0.631292	-0.095324	0.24933
USE1	0.114236	-0.023546	0.080436	-0.036126	0.086629	-0.065554	0.127484
USE2	0.017689	-0.045326	0.118347	-0.097101	0.039208	-0.017704	0.150854
USE3	-0.046517	0.098889	0.315955	-0.286519	0.080212	-0.196636	0.591466
USE4	0.038741	0.121394	0.18135	-0.11998	0.203634	-0.259496	0.573675
USE5	-0.065556	0.039527	0.195666	-0.051997	0.04364	-0.172365	0.412796
USE6	-0.080537	0.030385	0.168505	-0.144502	0.189273	-0.173196	0.555927

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#### AVE

	AVE
Acceptance	
Adhocracy	0.611973
Clan	0.585714
Hierarchy	0.555348
Importance	
Market	0.611317
Use	

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#### Communality

	communality
Acceptance	0.350252
Adhocracy	0.611973
Clan	0.585714
Hierarchy	0.555348
Importance	0.262391
Market	0.611317
Use	0.199567

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#### Total Effects

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
Acceptance							-0.19165
Adhocracy	-0.166324				-0.291236		0.035801
Clan	-0.091569				-0.071094		0.284516
Hierarchy	-0.164753				-0.293183		-0.036801
Importance	0.473868						0.213141
Market	-0.102206				-0.172802		-0.153545
Use							

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#### Composite Reliability

	Composite Reliability
Acceptance	
Adhocracy	0.862696
Clan	0.894381
Hierarchy	0.833052
Importance	
Market	0.824925

Use	
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#### Outer Loadings

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.777174					
AC2		0.78308					
AC3		0.851455					
AC6		0.711128					
ACC1	0.550944						
ACC2	0.387492						
ACC3	0.652412						
ACC4	0.679008						
ACC5	0.640995						
CC1			0.786536				
CC2			0.75197				
CC3			0.825963				
CC4			0.745817				
CC5			0.742129				
CC6			0.735509				
HC1				0.786341			
HC3				0.726592			
HC4				0.720796			
HC5				0.745371			
MC2						0.751345	
MC3						0.820732	
MC4						0.771901	
PI1					0.606043		
PI2					0.399514		
PI3					0.160152		
PI4					0.523829		
PI5					0.590656		
PI6					0.631292		
USE1							0.127484
USE2							0.150854
USE3							0.591466
USE4							0.573675
USE5							0.412796
USE6							0.555927

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#### Outer Model (Weights or Loadings)

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.777174					
AC2		0.78308					
AC3		0.851455					
AC6		0.711128					
ACC1	0.328729						
ACC2	0.19496						
ACC3	0.370754						
ACC4	0.406867						
ACC5	0.351317						
CC1			0.786536				
CC2			0.75197				
CC3			0.825963				
CC4			0.745817				
CC5			0.742129				
CC6			0.735509				
HC1				0.786341			
HC3				0.726592			
HC4				0.720796			
HC5				0.745371			
MC2						0.751345	
MC3						0.820732	
MC4						0.771901	
PI1					0.472547		
PI2					0.135211		
PI3					0.087405		
PI4					0.29224		
PI5					0.273243		
PI6					0.524517		
USE1							0.315876
USE2							0.298634
USE3							0.326685
USE4							0.448167
USE5							0.307925
USE6							0.606636

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#### Path Coefficients

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
Acceptance							-0.19165
Adhocracy	-0.028317				-0.291236		0.092448
Clan	-0.05788				-0.071094		0.288577
Hierarchy	-0.025824				-0.293183		0.020739
Importance	0.473868						0.303958
Market	-0.020321				-0.172802		-0.120608
Use							

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#### Latent Variable Scores

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
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	-0.527279	1.40482	1.233103	-1.762661	0.6123	-1.553597	2.97459
	-1.017187	0.46135	0.140893	-0.487741	0.187403	0.034144	0.247931
	-0.701363	-2.007101	-1.18741	1.017929	-0.586089	1.849693	0.59434
	0.956639	-0.7173	2.70545	-1.237554	1.247464	-1.6333	0.722209
	-0.020278	1.455024	-0.730085	0.703609	-1.072571	-0.44404	-1.229777
	1.227519	-1.358275	-0.258699	1.173928	0.368001	0.023409	0.252018
	0.267696	-1.071481	0.358448	-0.071281	0.165321	0.108197	0.620263
	-0.738449	-0.946041	-1.174208	0.546217	-0.299908	1.308192	-1.339555
	0.732993	0.755995	0.627414	-0.894916	1.948755	-1.6333	1.907423
	-0.55189	-0.305065	1.555846	-0.056883	2.000205	-1.802876	2.524217
	1.016349	-0.761064	1.515608	-0.918598	1.580022	-0.258077	1.082759
	0.270935	0.047632	-0.618379	0.159469	0.284457	0.389682	0.055724
	0.238467	0.814048	1.021115	-1.439057	2.140092	-0.528828	0.037701
	1.52335	-0.946041	0.14309	1.601531	0.284457	-0.821049	0.552276
	1.227519	0.393964	0.1562	0.585678	0.284457	-1.091799	-0.004363
	-0.559747	0.276374	1.538537	-0.698992	1.522348	-1.351814	0.349878
	1.053435	-0.659246	0.549983	-0.056883	1.925286	-1.447338	0.818779
	0.708382	0.107169	-0.08592	-0.164136	0.251634	0.389682	0.051706
	-0.733832	-1.232836	1.146194	-0.782098	0.420839	-0.072115	0.676331
	-1.524188	1.100843	-0.101745	0.78718	-1.118172	-0.810314	0.274059
	1.008491	-0.364602	0.271814	-0.291816	0.260991	-0.247342	-0.240721
	0.238467	-0.121572	-0.34952	0.01229	-1.379839	0.304895	-0.212865
	-0.55189	-0.305065	-0.197118	0.880035	-1.011108	0.034144	-0.786935
	-0.514804	0.047632	-0.18591	-1.356415	0.284457	1.23414	-0.400463
	-0.514804	-0.010421	-0.122692	-0.326165	-0.490419	-0.709139	0.992526
	-0.514804	-0.946041	1.612331	0.944572	-0.796302	-1.52139	2.143849
	-1.017187	1.168229	-0.814817	-0.384672	-0.159193	1.026707	0.454348
	-0.522661	0.401813	-0.618379	0.390218	-0.819769	0.671168	-0.286598
	1.202908	-0.179625	2.59008	-1.468304	0.940197	-1.824347	0.568213
	1.003874	1.455024	-0.664595	0.380004	0.069651	-0.788842	-1.001252
	-0.514804	-0.946041	1.061811	0.60054	-0.85915	-1.070328	0.274059
	2.495648	0.107169	0.894543	-0.272783	1.619403	-1.436602	0.542085
	-0.770918	0.814048	-1.272294	1.757529	-0.891972	-0.810314	-0.154478
	-0.984719	0.527253	0.994376	0.649286	-0.85915	-2.095097	-1.011442
	-1.017187	0.107169	-1.566821	2.670313	-1.260703	-0.788842	-0.492781
	-1.245451	1.108692	-1.777446	3.420592	-0.700511	-0.528828	0.274059
	0.732993	0.821897	0.175746	0.351686	-0.699126	-1.436602	1.813377
	-0.514804	-0.062035	-0.041622	-1.07692	-0.699126	0.867866	0.22589
	0.23061	0.401813	0.944217	-1.752448	-0.297695	0.118932	1.647297
	-1.240833	-0.121572	-0.618657	0.807607	-0.626923	1.308192	-0.0842
	0.919553	-2.057304	2.438491	-0.565734	0.962278	-1.261375	-0.324644
	-0.052746	0.527253	0.298859	0.232826	0.590218	-0.979889	1.929532
	1.202908	-0.018271	0.379377	-0.164136	0.783064	0.118932	-0.046222
	-0.450476	0.814048	0.344615	0.0564	0.63582	-1.25064	0.808657
	1.016349	0.174556	-0.029708	-0.791847	0.731489	-0.613616	0.616449
	1.239994	-0.305065	2.826646	-1.678626	1.343134	-1.267026	1.270948
	1.239994	-0.761064	2.826646	-0.7626	0.284457	-1.553597	1.270948
	0.449637	1.455024	0.338713	-0.949239	1.895793	-0.072115	1.308926
	-1.021805	0.58679	-0.041622	-0.884702	-0.164082	-0.258077	1.453032
	-0.746307	0.46135	2.446081	-2.160552	-0.416831	-0.528828	0.894666
	0.737611	-0.946041	3.134545	-1.468304	1.588525	-2.365848	0.600444
	-1.273301	-1.358275	2.053974	-1.659592	0.453836	-0.799578	0.552276
	1.481646	1.042789	0.217516	-0.449209	0.687394	-1.351814	0.187845
	-0.22683	-0.946041	3.134545	-0.821094	-0.118481	-2.365848	0.916707
	-0.268534	-0.59186	-2.163947	2.013355	0.398879	1.849693	-0.150459
	0.737611	-0.239162	0.206416	-0.919527	0.188787	-0.06703	-0.046222
	-0.547272	0.814048	0.650244	-1.797486	-0.85915	0.129668	0.349878
	0.263078	-0.878655	0.542699	1.184142	1.620909	-0.905837	-0.176382
	-0.052746	-0.364602	0.029711	1.027214	0.105242	-0.895101	-1.471647
	-0.738449	1.351722	-0.360883	0.19893	0.240362	-0.518092	1.028418
	-0.55189	1.050639	0.086859	-1.115452	-0.603457	0.47447	0.932644
	0.425027	1.100843	0.346532	-0.884702	0.188787	-0.528828	0.906516
	-0.514804	-0.179625	0.963969	-0.791847	-0.21415	0.023409	0.236013
	-0.547272	0.174556	1.475497	-1.262631	1.250794	-1.553597	0.263868
	0.732993	0.528737	1.475497	-1.262631	-0.200519	-1.553597	0.6283
	-0.738449	1.39697	1.296891	-1.586235	0.896101	-1.824347	0.872557
	-1.029662	0.401813	-0.14551	-0.340562	0.033039	0.389682	1.366722
	1.988647	-0.297216	1.254295	-0.939026	-0.394749	-0.895101	0.612363
	-0.276391	-1.351287	-1.288336	3.697212	-0.976901	-0.733781	-1.151366
	-0.514804	-1.240685	1.844283	0.017868	0.747473	-1.091799	0.327837
	-0.522661	1.285819	0.396657	-1.159561	-1.282663	-0.061379	1.274966
	-1.270061	0.335911	0.828849	-1.031881	-0.840519	-0.056295	1.056631
	-0.738449	-0.820601	-1.205134	0.129757	0.241746	1.026707	-1.245646
	-1.017187	-1.814274	-1.147725	1.081072	0.515124	0.745221	-1.027311
	2.212293	0.688608	0.676997	-0.330348	0.535875	-0.704054	0.011574
	-0.007803	-0.657763	1.077449	-0.811345	0.238855	0.580729	0.416137
	-0.057364	-0.59186	1.15458	-0.747737	2.700162	-0.895101	1.04249
	0.474248	0.334427	-0.635939	-0.050853	0.047516	2.04074	-0.290617
	0.732993	1.042789	1.3543	-0.939026	1.0767	-2.365848	-0.67307
	-0.206837	-0.59186	1.465483	-1.880128	-0.76681	0.745221	0.884475
	-0.733832	1.455024	-0.164996	-0.977558	-1.051995	-0.337781	-1.00527
	-0.770918	0.401813	-0.439774	0.159469	-0.372789	0.389682	0.7245
	-0.268534	3.282499	-0.943442	-0.850807	-0.468459	-0.799578	-0.843004
	-0.510186	0.34376	0.396674	-0.478456	-1.051995	-0.725526	-1.00527
	-0.957477	0.34376	0.218069	-0.571311	-1.051995	-0.996276	-1.00527
	-1.005051	0.688608	-0.266705	-0.267205	-1.939909	-0.162554	-1.343574
	-0.584358	0.519404	1.869281	-1.610846	-1.260703	-1.081064	-0.647011
	-1.029662	-1.416329	0.85398	-1.209236	-0.036029	0.299244	0.349878
	0.23061	1.455024	1.573007	-3.018083	2.105885	-1.261375	1.044809
	0.732993	0.34376	1.5918	-2.076981	1.34175	0.840744	0.882748
	-0.251781	-0.533806	-0.283725	0.630252	-0.352039	0.389682	-1.053439
	1.976172	0.814048	1.748085	-1.640094	1.34175	-1.081064	-1.343574
	0.932028	-1.232836	-0.801184	0.968254	0.72872	0.103112	-1.015461
	-0.239306	-1.358275	0.123611	-0.468242	1.24608	1.132966	0.134135
	0.449637	-0.946041	0.340876	-0.615421	0.284457	0.294159	1.270948
	-0.738449	-0.659246	-0.353167	1.581103	-0.797687	-0.990625	0.586303
	0.521823	-0.59186	1.427118	-0.653953	-0.34179	-0.359252	-0.24862
	0.732993	1.749668	0.470416	-0.418567	-0.34179	-1.802876	0.940544
	0.420409	1.741818	0.749958	-1.159561	-0.490419	0.012673	-1.095298
	0.976632	0.401813	-0.537862	0.188716	1.343134	0.389682	-0.723035
	-0.559747	0.755995	-0.635661	0.0564	-0.958149	0.023409	0.199763
	-0.770918	2.161902	0.206689	-0.865204	-0.700633	-1.6333	0.191931
	-2.339156	1.110176	0.142928	-0.021593	-0.700633	-1.091799	0.371987
	-0.527279	0.46135	-0.464601	0.767681	-0.649058	-0.528828	-0.651029
	0.725136	-0.59186	-0.956381	1.782605	1.343134	0.304895	-1.001252
	-0.770918	1.168229	0.737138	-1.428843	-0.355422	-0.528828	0.280163
	0.449637	-0.297216	1.082698	-0.443631	0.047516	-0.788842	-0.074077
	-0.522661	0.814048	0.863871	-0.928812	-0.164082	-0.613616	-0.624902

	-1.054273	-0.59186	-0.249253	-0.090779	-0.839013	-0.247342	0.007555
	1.028824	0.459867	-0.474626	-0.53185	0.518015	-0.151818	-0.308707
	0.745468	1.395487	1.409548	-1.135879	-0.044771	-1.824347	-0.1165
	-0.559747	-1.712456	0.751695	-0.100993	-0.840398	-0.528828	0.203781
	0.44178	-2.057304	1.138935	-0.423204	0.325169	0.745221	0.307881
	-2.314545	0.115019	-0.091747	0.066613	-1.729817	0.108197	-1.00527
	-0.775535	-1.587017	1.343753	-0.601024	2.02234	-0.624351	1.903405
	0.770079	0.401813	-0.439774	-0.164136	-0.630306	0.389682	0.770611
	0.23061	-0.878655	1.464949	-0.100993	-0.840398	-0.624351	0.349878
	-0.527279	-0.010421	0.783601	-0.438066	0.535875	0.034144	0.650409
	0.44178	0.284223	0.197123	0.306648	0.284457	-0.905837	1.270948
	0.732993	-0.651397	1.044749	-0.615421	0.518015	-0.788842	1.244888
	-0.514804	-0.878655	1.230911	0.204507	1.217971	-0.528828	0.247931
	0.944163	-1.881661	-0.255325	1.728282	0.240362	0.001937	2.141695
	-1.240833	-0.239162	0.300316	-0.571311	-1.32688	-0.162554	-1.00527
	-1.021805	-1.77051	3.134545	-0.791847	-1.033243	-1.6333	1.384744
	-2.217749	1.100843	0.502056	-1.257982	-1.729817	0.58638	-1.00527
	0.201381	0.696458	-0.607449	-0.443631	-0.490419	0.755956	-1.027379
	0.50149	2.103849	-0.424211	0.066613	0.663928	0.575645	1.016362
	2.236904	-0.946041	-0.328313	0.188716	0.240362	0.20372	0.650341
	0.449637	-0.946041	-0.328313	0.512321	0.238855	0.20372	0.290354
	0.732993	0.881434	-0.25117	-0.653953	-0.647674	-0.247342	0.371987
	0.449637	-0.483603	0.10851	1.028143	-0.509171	-0.353601	0.568213
	-0.770918	0.107169	-0.683885	0.610754	0.72872	0.129668	0.387856
	0.944163	0.284223	-0.101212	-0.276954	0.047516	-0.162554	0.634404
	-2.501105	-1.011944	-1.028275	1.007716	-0.839013	0.766692	0.66614
	0.23061	-0.703011	0.604045	0.346109	0.663928	0.20372	0.315918
	1.232137	0.630555	-0.451257	-1.428843	2.02234	-0.077766	0.339755
	2.236904	0.056965	-0.636212	0.350292	1.343134	-0.247342	-0.368726
	1.227519	-1.240685	0.214405	1.115421	-1.422549	0.012673	-1.015461
	1.016349	-0.010421	-1.043565	0.390218	-0.087482	0.862215	-0.813063
	1.235376	-0.239162	-0.387639	-0.164136	0.047516	0.389682	-1.916217
	0.68805	1.042789	-0.731729	0.194294	0.047516	-0.077766	-1.916217
	0.44178	-1.417812	-0.324404	0.703609	0.047516	0.755956	-1.916217
	-0.527279	-0.430505	0.63715	-0.684594	-0.139056	-0.810314	0.007555
	1.215383	1.867258	-1.258923	-0.256991	-0.490419	0.118932	-3.273451
	-1.240833	-0.187475	-0.076184	0.512321	-0.140441	0.952654	-0.090304
	0.250603	-0.179625	-0.487447	0.287149	-0.394749	0.304895	-1.053439
	1.498739	2.448697	-1.01463	-0.580596	-0.275613	-0.247342	-1.884344
	1.702052	-0.179625	-0.878342	-0.365638	-0.280327	0.389682	-0.246301
	-0.770918	0.585307	-0.666604	-0.153922	-0.839013	0.575645	0.007555
	2.236904	-0.59186	-0.551207	0.193365	-0.394749	1.026707	-0.444613
	-0.328244	1.455024	-0.574343	-0.026242	-1.921157	0.034144	-1.343574
	-0.738449	0.873585	0.106608	-0.153922	-0.743343	-1.091799	0.371987
	1.490882	0.527253	0.882636	-2.743224	-0.394749	1.201933	-2.400549
	0.238467	-0.651397	-0.311006	0.434328	0.450453	1.568207	-0.853496
	0.591377	-0.364602	-0.981509	0.380004	0.450453	0.575645	0.259782
	0.23061	2.448697	-0.860772	-0.571311	0.047516	-0.884366	1.141146
	1.473789	1.176078	-0.628115	-0.311315	1.409311	-0.528828	1.465514
	0.914935	-0.946041	-0.328313	0.188716	2.02234	0.20372	-1.685896
	-0.55189	0.4692	-0.203207	-0.267205	-0.630306	0.023409	-0.142559
	0.270935	-0.776836	-0.662722	0.419465	1.131044	0.129668	-0.308707
	-0.733832	-0.533806	-0.643233	1.655854	-1.921157	-0.613616	-1.674046
	1.028824	0.047632	-0.422754	0.159469	-0.840398	0.485206	-0.368794
	-0.057364	1.341	-0.68181	0.527183	-0.840398	-0.698403	0.586303
	-1.464478	1.341	-0.68181	0.527183	0.31395	-0.698403	1.154792
	0.412551	0.527253	-0.320757	-0.350776	0.284457	0.034144	1.270948
	2.025733	1.455024	-0.735929	0.297363	2.02234	0.400418	1.016362
	0.23061	-0.305065	-0.640122	0.660429	0.047516	1.477768	1.274966
	-0.052746	-2.007101	-0.51448	1.841565	0.450453	0.766692	-0.853496
	-0.738449	1.817054	-0.556771	0.253253	-0.839013	-0.348516	0.564194
	0.449637	0.232609	-0.689711	-0.350776	-0.044771	0.304895	-0.376626
	-0.733832	-0.946041	-0.326947	-0.321528	1.602157	1.308192	-0.176519
	-1.021805	-1.77051	-1.139763	1.232887	-0.840398	1.318928	0.199763
	-1.017187	-0.525957	-1.429539	2.940059	-1.921157	-0.613616	-2.046309
	-0.770918	1.100843	-1.30295	-0.413919	-0.43746	1.403716	-0.334835
	0.25846	0.115019	0.1139	-0.693414	-1.146281	0.931183	0.017746
	1.232137	-2.293895	-1.250906	1.360568	1.059333	2.226703	-0.324644
	0.513965	-1.999251	-1.4933	1.360568	0.450453	2.226703	-1.916217
	1.414079	-1.64507	-1.136089	1.360568	1.808865	2.226703	0.059537
	0.509347	-0.59186	-0.383822	1.547207	0.450453	0.575645	-0.853496
	-0.733832	-1.64507	-1.435338	0.978468	-1.241951	1.955952	0.007555
	0.243085	0.115019	-1.037738	0.463575	1.409311	0.941919	-0.308707
	1.239994	0.401813	-0.739576	-0.164136	0.963663	0.368211	-1.139448
	0.944163	-1.939714	-1.193498	1.360568	-0.140441	2.226703	-0.142559
	1.729902	-0.422655	-0.1801	1.184142	1.619403	0.304895	-0.775085
	-1.743216	0.401813	-0.537862	0.797394	-1.729817	-0.173289	-1.343574
	-0.052746	0.401813	-0.537862	0.797394	-0.140441	-0.173289	1.827586
	-0.775535	0.047632	-0.537862	0.512321	-0.630306	0.389682	0.530001
	1.697434	0.047632	-0.618379	0.483074	-0.840398	0.389682	-0.004363
	-2.018714	0.401813	-0.618379	-0.164136	-2.131248	0.389682	-0.673138
	-1.240833	0.401813	-0.261168	-0.164136	0.284457	0.389682	1.270948
	-0.251781	0.047632	-0.261168	0.159469	1.217971	0.389682	-0.312424
	0.243085	0.047632	-0.796985	0.483074	0.050899	0.389682	-1.132164
	-1.240833	0.401813	-0.439774	-0.164136	0.209362	0.389682	1.14696
	-0.22683	0.047632	-0.618379	0.483074	0.11846	0.389682	-1.353764
	-0.770918	0.401813	-0.439774	-0.164136	-1.729817	0.389682	0.09377
	-0.770918	0.401813	-0.439774	0.159469	-1.239952	0.389682	-2.214747
	0.225992	0.755995	-0.439774	0.159469	-0.819769	0.389682	1.22507
	-1.240833	0.401813	-0.439774	0.159469	-0.891972	0.389682	0.361796
	0.732993	0.401813	-0.439774	-0.164136	1.409311	0.389682	1.465514
	0.732993	0.401813	-0.439774	-0.164136	1.619403	0.389682	-0.138541
	-0.514804	0.401813	-0.537862	0.473789	-0.840398	-0.173289	-0.342667
	0.225992	0.401813	-0.537862	0.473789	1.619403	-0.173289	0.221872
	-2.018714	0.401813	-0.537862	0.297363	-1.921157	-0.173289	-0.356876
	-0.738449	0.401813	-0.537862	0.297363	-0.840398	-0.173289	0.360068
	-0.584358	0.401813	-0.439774	-0.164136	-0.630306	0.389682	-1.880462
	-0.770918	0.401813	-0.439774	-0.164136	-0.840398	0.389682	-0.684989
	-0.514804	0.401813	-0.439774	-0.164136	-1.239952	0.389682	-0.230296
	-0.044889	0.401813	-0.439774	-0.164136	0.634435	0.389682	-0.004363
	-0.957477	0.401813	-0.439774	-0.164136	-1.146281	0.389682	0.371987
	0.708382	0.401813	-0.439774	-0.164136	1.619403	0.389682	0.103989
	-0.052746	0.401813	-0.439774	-0.164136	0.450453	0.389682	-0.320558
	0.238467	0.401813	-0.439774	0.483074	0.450453	0.389682	-0.12835
	-2.493247	0.401813	-0.439774	0.159469	0.450453	0.389682	0.175926
	0.745468	0.401813	-0.439774	0.483074	-0.68188	0.389682	0.007555
	-1.285776	0.047632	-0.439774	0.483074	-1.729817	0.389682	0.077833
	1.421936	0.401813	-0.439774	-0.164136	-0.85915	0.389682	-1.001252

	-2.995631	0.401813	-0.439774	-0.164136	-0.840398	0.389682	0.15767
	-0.231448	-1.64507	-1.250906	1.684172	1.619403	2.226703	-0.673138
	0.541816	-1.350426	-1.314694	1.360568	-1.519725	2.226703	-0.979142
	0.713	-1.64507	-1.193498	1.684172	0.518015	2.226703	-0.36298
	-0.937484	-1.350426	-1.372103	1.360568	-1.050489	2.226703	-1.321533
	-0.527279	-1.64507	-1.193498	1.036963	-0.840398	2.226703	-2.596843
	-0.746307	-1.64507	-1.250906	1.684172	-2.131248	2.226703	-1.708005
	0.449637	-1.350426	-0.903432	1.036963	0.284457	1.945217	-0.68097
	-1.054273	-1.64507	-1.193498	1.684172	-0.490419	2.226703	-1.843911
	1.709909	-1.585533	-1.250906	1.036963	0.709354	2.226703	-1.956281

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Outer Weights

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.310164					
AC2		0.267981					
AC3		0.464561					
AC6		0.215918					
ACC1	0.328729						
ACC2	0.19496						
ACC3	0.370754						
ACC4	0.406867						
ACC5	0.351317						
CC1			0.242461				
CC2			0.187771				
CC3			0.290097				
CC4			0.214816				
CC5			0.179995				
CC6			0.183132				
HC1				0.440518			
HC3				0.307344			
HC4				0.314634			
HC5				0.273021			
MC2						0.374957	
MC3						0.508647	
MC4						0.389707	
PI1					0.472547		
PI2					0.135211		
PI3					0.087405		
PI4					0.29224		
PI5					0.273243		
PI6					0.524517		
USE1							0.315876
USE2							0.298634
USE3							0.326685
USE4							0.448167
USE5							0.307925
USE6							0.606636

Index Values

Results

Measurement Model (restandardised)

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.177496					
AC2		0.167612					
AC3		0.151109					
AC6		0.19408					
ACC1	0.50238						
ACC2	0.283352						
ACC3	0.494522						
ACC4	0.50701						
ACC5	0.469915						
CC1			0.115878				
CC2			0.092405				
CC3			0.092013				
CC4			0.077396				
CC5			0.080884				
CC6			0.097352				
HC1				0.11553			
HC3				0.104273			
HC4				0.105725			
HC5				0.096331			
MC2						0.108506	
MC3						0.118201	
MC4						0.111509	
PI1					0.677825		
PI2					0.210085		
PI3					0.095669		
PI4					0.349981		
PI5					0.402934		
PI6					0.679208		
USE1							0.342323
USE2							0.338299
USE3							0.364429
USE4							0.556642
USE5							0.354241
USE6							0.658586

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Path Coefficients

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
Acceptance							-0.165456
Adhocracy	-0.00866		6		-0.083222		0.024409

<b>Clan</b>	-0.014256				-0.016361		0.06136
<b>Hierarchy</b>	-0.004826				-0.051199		0.003346
<b>Importance</b>	0.507148						0.280844
<b>Market</b>	-0.003045				-0.024194		-0.015602
<b>Use</b>							

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Measurement Model

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
AC1		0.25713					
AC2		0.242811					
AC3		0.218904					
AC6		0.281154					
ACC1	0.22257						
ACC2	0.125534						
ACC3	0.219089						
ACC4	0.224621						
ACC5	0.208187						
CC1			0.208441				
CC2			0.166217				
CC3			0.165513				
CC4			0.139219				
CC5			0.145494				
CC6			0.175117				
HC1				0.273858			
HC3				0.247176			
HC4				0.250617			
HC5				0.22835			
MC2						0.320819	
MC3						0.349483	
MC4						0.329697	
PI1					0.280591		
PI2					0.086966		
PI3					0.039603		
PI4					0.144878		
PI5					0.166798		
PI6					0.281164		
USE1							0.130931
USE2							0.129392
USE3							0.139387
USE4							0.212904
USE5							0.13549
USE6							0.251896

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Latent Variable Scores (unstandardised)

	Acceptance	Adhocracy	Clan	Hierarchy	Importance	Market	Use
Case 0	3.441658	28.977077	35.226207	17.26142	4.135714	14.812289	4.651606
Case 1	3.224621	24.87988	28.711427	23.63071	3.959824	23.296973	3.608718
Case 2	3.364538	16.214056	20.072353	31.253084	3.63963	33.208193	3.741215
Case 3	4.099087	21.40519	45	18.969589	4.398642	13.494834	3.790115
Case 4	3.666279	28.594228	23.635736	28.974458	3.438245	20.09893	3.043523
Case 5	4.219089	18.905481	26.449556	32.360419	4.034587	23.252583	3.610284
Case 6	3.793864	20.119537	29.977976	25.116205	3.95068	23.351513	3.751124
Case 7	3.348103	20	20.730987	28.729709	3.758439	30	3.001539
Case 8	4	26.285652	32.056654	21.235878	4.68895	13.494834	4.243441
Case 9	3.430757	22.499709	38.281864	26.08526	4.710245	13.296973	4.479352
Case 10	4.125534	19.760343	37.077112	21.17616	4.536312	21.604096	3.928022
Case 11	3.795294	23.714348	23.957796	26.36929	4	25	3.5352
Case 12	3.780911	26.094519	34.414926	18.63071	4.768156	20	3.528311
Case 13	4.350155	20	28.772928	34.789664	4	18.307123	3.725124
Case 14	4.219089	24.808284	28.852576	29.661121	4	16.703027	3.512219
Case 15	3.427276	25.119537	37.458362	21.485495	4.512435	15.143321	3.647709
Case 16	4.141968	21.214056	31.332962	26.08526	4.679233	15	3.827058
Case 17	3.989098	23.594228	27.447261	25	3.986413	25	3.533661
Case 18	3.350155	18.785944	34.705613	23.175626	4.056455	23.109262	3.77257
Case 19	3	27.308575	27.334295	30	3.419364	18.351513	3.618712
Case 20	4.122053	22.619829	29.009877	23.880327	3.990283	21.648487	3.421819
Case 21	3.780911	22.189038	25.494224	26.141748	3.31105	24.90107	3.432475
Case 22	3.430757	22.499709	26.640145	30.116205	3.463688	23.296973	3.212904
Case 23	3.447191	23.714348	26.773549	18.729709	4	29.94546	3.360719
Case 24	3.447191	23.905481	26.721654	24.827307	3.679233	19.757749	3.893507
Case 25	3.447191	20	38.392915	30.244749	3.552611	14.94546	4.333868
Case 26	3.224621	27.380171	22.613882	23.764122	3.81635	28.351513	3.687671
Case 27	3.44371	25	23.957796	27.622374	3.542894	26.648487	3.404269
Case 28	4.208187	22.380171	44.168915	17.716505	4.271447	13.208193	3.731221
Case 29	4.120001	28.594228	23.961315	27.605168	3.911077	18.440294	3.130931
Case 30	3.447191	20	35.238787	28.841046	3.526595	16.791807	3.618712
Case 31	4.780911	23.594228	33.256579	24.777326	4.552611	15.04439	3.721227
Case 32	3.333721	26.094519	20.303268	35.896999	3.513008	18.351513	3.454805
Case 33	3.239004	24.880463	34.283814	28.863121	3.526595	11.604096	3.127035
Case 34	3.224621	23.594228	17.932136	40.89213	3.36037	18.440294	3.325413
Case 35	3.123482	27.500291	17.406024	43.764122	3.592267	20	3.618712
Case 36	4	26.286235	29.227776	27.617506	3.59284	15.04439	4.207468
Case 37	3.447191	22.068918	27.534234	20.004869	3.59284	28.198043	3.60029
Case 38	3.77743	25	33.626315	17.278627	3.759012	23.395904	4.143945
Case 39	3.125534	22.189038	24.105553	30.034413	3.622725	30	3.481683
Case 40	4.082653	16.596906	43.110068	22.69443	4.280591	16.505166	3.389716
Case 41	3.651897	24.880463	30.012868	27.377626	4.126569	18.153653	4.251896
Case 42	4.208187	23.713765	30.327603	25	4.206401	23.395904	3.496209
Case 43	3.475688	26.094519	30.090491	26.235878	4.14545	16.549556	3.823188
Case 44	4.125534	23.665824	27.212461	21.36929	4.185053	19.90107	3.74967
Case 45	4.224621	22.499709	45.875583	16.497833	4.438245	15.242251	4
Case 46	4.224621	19.760343	45.875583	22.283495	4	14.812289	4
Case 47	3.874466	28.594228	29.730021	21.124541	4.66703	23.109262	4.014526

Case 48	3.22257	24.760343	27.534234	21.253084	3.814321	21.604096	4.069648
Case 49	3.344622	24.87988	44.017096	13.957252	3.709692	20	3.856082
Case 50	4.002051	20	47.915593	17.716505	4.539835	10	3.743546
Case 51	3.111151	18.905481	40.43344	17.394832	4.070114	18.395904	3.725124
Case 52	4.331669	27.499709	28.854437	23.635579	4.166798	15.143321	3.585737
Case 53	3.574776	20	47.915593	20.455085	3.833202	10	3.86451
Case 54	3.55629	21.285652	14.661038	36.347215	4.047363	33.208193	3.456345
Case 55	4.002051	22.500291	29.263284	20.249617	3.960397	21.890738	3.496209
Case 56	3.432808	26.094519	32.052776	16.257953	3.526595	23.440294	3.647709
Case 57	3.791813	20.071596	31.297813	32.377626	4.553237	18.208193	3.446431
Case 58	3.651897	22.619829	27.867576	30.343748	3.92581	18.252583	2.951014
Case 59	3.348103	27.069501	26.014092	27.300701	3.981745	20.04439	3.907242
Case 60	3.430757	27.691425	28.444966	20	3.632442	25.09893	3.870608
Case 61	3.863565	27.308575	30	21.253084	3.960397	20	3.860613
Case 62	3.447191	22.380171	34.137285	21.36929	3.793599	23.252583	3.604159
Case 63	3.432808	23.665824	36.977373	19.772458	4.400026	14.812289	3.614815
Case 64	4	24.951476	36.977373	19.772458	3.79924	14.812289	3.754202
Case 65	3.348103	28.785361	35.93517	18.403168	4.253191	13.208193	3.847627
Case 66	3.219089	25	27.182404	23.858252	3.895924	25	4.036634
Case 67	4.55629	22.691425	35.464813	21.141748	3.718836	18.252583	3.748104
Case 68	3.552809	18.195229	19.94413	44.53938	3.477848	18.962458	3.073518
Case 69	3.447191	18.594228	40.41977	26.231009	4.191668	16.703027	3.639281
Case 70	3.44371	27.068918	30.131471	19.905869	3.351278	23.153653	4.001539
Case 71	3.112581	24.999418	33.09498	21.025542	3.534303	21.935128	3.918027
Case 72	3.348103	19.880463	20.612641	27.244214	3.982317	28.351513	3.037452
Case 73	3.224621	16.166115	20.779261	32.244214	4.095485	26.703027	3.120964
Case 74	4.655378	26.214056	32.147153	23.875459	4.104076	18.539224	3.518317
Case 75	3.671812	21.28507	35.778746	22.26142	3.981119	25.286641	3.673048
Case 76	3.649845	21.285652	35.436701	21.46342	5	18.252583	3.912619
Case 77	3.885368	24.928404	24.001936	25.150618	3.901913	33.494834	3.40273
Case 78	4	27.499709	36.10179	21.141748	4.327955	10	3.256454
Case 79	3.583626	21.285652	36.945641	16.158954	3.564814	26.703027	3.852185
Case 80	3.350155	28.594228	27.159912	21.136879	3.446763	20.286641	3.129392
Case 81	3.333721	25	25	26.36929	3.727927	25	3.790993
Case 82	3.55629	34.760343	22.813292	21.330009	3.688325	18.395904	3.191462
Case 83	3.449242	25.191133	30.394485	22.721373	3.446763	18.450444	3.129392
Case 84	3.251067	25.191133	29.352281	22.605168	3.446763	16.846347	3.129392
Case 85	3.22999	26.214056	26.60657	24.866588	3.079206	21.747417	3
Case 86	3.416374	24.688747	39.757508	17.416907	3.36037	16.747417	3.266421
Case 87	3.219089	19.096614	33.395105	18.957252	3.867326	23.638154	3.647709
Case 88	3.77743	28.594228	36.786861	10	4.753996	16.505166	3.913508
Case 89	4	25.191133	38.320899	14.982794	4.437672	26.846347	3.851519
Case 90	3.563711	21.094519	26.391932	27.966122	3.736519	25	3.11097
Case 91	4.550758	26.094519	38.881925	16.502702	4.437672	16.747417	3
Case 92	4.088186	18.785944	22.171738	30.304467	4.183908	24.570038	3.125496
Case 93	3.569243	18.905481	28.60781	22.73858	4.398069	28.539224	3.565195
Case 94	3.874466	20	29.265495	22.511037	4	24.856679	4
Case 95	3.348103	21.214056	25.248213	34.755251	3.552038	18.109262	3.738137
Case 96	3.906445	21.285652	37.445418	22.506169	3.740756	20.19786	3.418795
Case 97	4	30	30.189015	23.687198	3.740756	13.296973	3.873627
Case 98	3.861513	29.808284	32.080888	19.905869	3.679233	23.208193	3.094959
Case 99	4.107938	25	24.272532	27.283495	4.438245	25	3.237343
Case 100	3.427276	26.285652	23.85418	26.235878	3.485608	23.252583	3.590295
Case 101	3.333721	31.094519	29.609135	20.360954	3.592214	13.494834	3.587303
Case 102	2.638944	27.571305	29.620058	25.299598	3.592214	16.703027	3.656164
Case 103	3.441658	24.87988	25.272004	30.89213	3.613561	20	3.264882
Case 104	3.996519	21.285652	22.343387	35.094131	4.438245	24.90107	3.130931
Case 105	3.333721	27.380171	32.610105	18.647916	3.735115	20	3.621043
Case 106	3.874466	22.691425	34.905264	23.724841	3.901913	18.440294	3.485553
Case 107	3.44371	26.094519	32.921322	21.158954	3.814321	19.90107	3.274876
Case 108	3.208187	21.285652	26.02018	26.008336	3.534928	21.648487	3.516778
Case 109	4.131066	24.808867	24.483651	23.53658	4.096683	21.791807	3.395814
Case 110	4.005532	28.714348	37.032685	19.965587	3.863714	13.208193	3.469331
Case 111	3.427276	17.619829	32.223532	25.991129	3.534355	20	3.591835
Case 112	3.870985	16.596906	35.090601	23.759253	4.016852	26.703027	3.631645
Case 113	2.649845	23.785944	27.402763	26.253084	3.166172	23.351513	3.129392
Case 114	3.331669	17.500291	36.134977	23.480092	4.719409	19.856679	4.241901
Case 115	4.016434	25	25	25	3.621322	25	3.808635
Case 116	3.77743	20.071596	37.01056	25.991129	3.534355	19.856679	3.647709
Case 117	3.441658	23.905481	32.532301	24.579328	4.104076	23.296973	3.762657
Case 118	3.870985	25.311253	28.73964	26.596832	4	18.208193	4
Case 119	4	21.405772	34.340999	22.511037	4.096683	18.440294	3.990033
Case 120	3.447191	20.071596	35.764203	27.389963	4.386439	20	3.608718
Case 121	4.093555	16.094519	26.349716	34.982794	3.981745	23.163802	4.33305
Case 122	3.125534	22.500291	30.003519	22.605168	3.33297	21.747417	3.129392
Case 123	3.22257	17.810962	47.915593	21.36929	3.454524	13.494834	4.043523
Case 124	2.692726	27.308575	31.613974	18.935177	3.166172	26.549556	3.129392
Case 125	3.764477	26.405772	24.238956	23.724841	3.679233	26.747417	3.120937
Case 126	3.897431	31.285652	25.223987	26.253084	4.157081	26.505166	3.902624
Case 127	4.666279	20	25.696095	27.283495	3.981745	23.494834	3.76263
Case 128	3.874466	20	25.696095	28.652785	3.981119	23.494834	3.624939
Case 129	4	26.166115	26.110671	22.506169	3.614134	21.648487	3.656164
Case 130	3.874466	20.71167	28.60243	31.270291	3.671473	21.460776	3.731221
Case 131	3.333721	23.594228	23.668953	28.858252	4.183908	23.440294	3.662235
Case 132	4.093555	25.311253	27.269376	23.060253	3.901913	21.747417	3.756532
Case 133	2.567192	19.999418	21.055329	31.235878	3.534928	26.791807	3.768674
Case 134	3.77743	19.569209	32.319309	27.528244	4.157081	23.494834	3.634723
Case 135	4.22114	26.40519	24.220996	18.647916	4.719409	21.846347	3.64384
Case 136	4.666279	23.977077	23.656085	28.480092	4.438245	21.648487	3.37286
Case 137	4.219089	18.594228	28.843257	31.297234	3.293367	23.208193	3.125496
Case 138	4.125534	23.905481	21.177193	27.622374	3.846031	26.935128	3.20291
Case 139	4.22257	22.500291	25.619966	25	3.901913	25	2.780971
Case 140	3.980085	27.499709	24.072079	27.372757	3.901913	21.846347	2.780971
Case 141	3.870985	19.025601	25.831085	28.974458	3.901913	26.747417	2.780971
Case 142	3.441658	22.619246	32.236142	22.45455	3.824683	18.351513	3.516778
Case 143	4.213719	29.688747	19.972146	24.883795	3.679233	23.395904	2.261863
Case 144	3.125534	22.188456	27.626749	28.652785	3.824111	28.296973	3.479352
Case 145	3.786281	22.380171	25.012868	27.488963	3.718836	24.90107	3.11097
Case 146	4.339253	32.308575	21.369807	23.514505	3.768156	21.648487	2.793166
Case 147	4.429327	22.380171	21.793888	24.661121	3.766199	25	3.419684



Case 148	3.333721	24.689329	23.472821	25.017206	3.534928	26.505166	3.516778
Case 149	4.666279	21.285652	25.023791	26.446214	3.718836	28.351513	3.343836
Case 150	3.529844	28.594228	24.15579	26.136879	3.086966	23.296973	3
Case 151	3.348103	25.974399	28.656186	25.017206	3.574531	16.703027	3.656164
Case 152	4.335772	24.880463	33.435726	11.347215	3.718836	29.812289	2.595731
Case 153	3.780911	21.405772	26.219848	27.716505	4.068711	31.559706	3.187441
Case 154	3.937262	22.619829	21.249905	27.605168	4.068711	26.505166	3.613249
Case 155	3.77743	32.308575	22.20663	22.605168	3.901913	18.296973	3.950352
Case 156	4.328188	27.571887	23.778308	24.772458	4.465645	20	4.074422
Case 157	4.080602	20	25.696095	27.283495	4.719409	23.494834	2.869069
Case 158	3.430757	25.071596	26.706668	24.866588	3.621322	23.252583	3.459364
Case 159	3.795294	21.52531	22.887925	28.53658	4.350448	23.440294	3.395814
Case 160	3.350155	21.094519	23.509915	34.901001	3.086966	19.90107	2.8736
Case 161	4.131066	23.714348	25.214638	26.36929	3.534355	25.143321	3.372833
Case 162	3.649845	27.674661	23.521746	27.83271	3.534355	19.80214	3.738137
Case 163	3.026446	27.674661	23.521746	27.83271	4.012203	19.80214	3.955573
Case 164	3.858032	24.880463	26.077095	23.841046	4	23.296973	4
Case 165	4.572724	28.594228	23.328224	27.506169	4.719409	25.04439	3.902624
Case 166	3.77743	22.499709	23.521095	29.80687	3.901913	30.19786	4.001539
Case 167	3.651897	16.214056	24.766498	35.133412	4.068711	26.791807	3.187441
Case 168	3.348103	30.071596	24.868271	27.412038	3.534928	20.242251	3.729682
Case 169	3.874466	23.47469	23.624454	23.841046	3.863714	24.90107	3.36984
Case 170	3.350155	20	25.407509	24.755251	4.545476	30	3.446375
Case 171	3.22257	17.810962	19.639348	32.399701	3.534355	30.04439	3.590297
Case 172	3.224621	21.286235	18.509915	40.360954	3.086966	19.90107	2.731221
Case 173	3.333721	27.308575	19.931275	22.849917	3.701153	30.143321	3.385819
Case 174	3.789762	23.785944	28.848459	21.574757	3.407733	28.208193	3.520675
Case 175	4.22114	15	20.272004	33.519373	4.320767	35	3.389716
Case 176	3.902964	16.405772	18.520838	33.519373	4.068711	35	2.780971
Case 177	4.301742	17.691425	20.605245	33.519373	4.631039	35	3.536658
Case 178	3.900913	21.285652	25.17597	34.678327	4.068711	26.505166	3.187441
Case 179	3.350155	17.691425	19.185302	30.321673	3.36813	33.395904	3.516778
Case 180	3.782963	23.785944	21.221692	28.63071	4.465645	28.252583	3.395814
Case 181	4.224621	25	23.082213	25	4.281164	24.911219	3.078076
Case 182	4.093555	16.285652	20.438624	33.519373	3.824111	35	3.459364
Case 183	4.441658	22.810962	26.555034	32.377626	4.552611	24.90107	3.217436
Case 184	2.902964	25	24.272532	30.017206	3.166172	21.703027	3
Case 185	3.651897	25	24.272532	30.017206	3.824111	21.703027	4.212904
Case 186	3.331669	23.714348	24.272532	28.652785	3.621322	25	3.716598
Case 187	4.427276	23.714348	23.957796	27.73858	3.534355	25	3.512219
Case 188	2.780911	25	23.957796	25	3	25	3.256427
Case 189	3.125534	25	26.042204	25	4	25	4
Case 190	3.563711	23.714348	26.042204	26.36929	4.386439	25	3.394399
Case 191	3.782963	23.714348	22.915593	27.73858	3.903317	25	3.463342
Case 192	3.125534	25	25	25	3.968916	25	3.95258
Case 193	3.574776	23.714348	23.957796	27.73858	3.931289	25	2.996103
Case 194	3.333721	25	25	25	3.166172	25	3.549753
Case 195	3.333721	25	25	26.36929	3.368961	25	2.666793
Case 196	3.775379	26.285652	25	26.36929	3.542894	25	3.98245
Case 197	3.125534	25	25	26.36929	3.513008	25	3.652268
Case 198	4	25	25	25	4.465645	25	4.074422
Case 199	4	25	25	25	4.552611	25	3.460903
Case 200	3.447191	25	24.272532	28.647916	3.534355	21.703027	3.382827
Case 201	3.775379	25	24.272532	28.647916	4.552611	21.703027	3.598751
Case 202	2.780911	25	24.272532	27.506169	3.086966	21.703027	3.377391
Case 203	3.348103	25	24.272532	27.506169	3.534355	21.703027	3.651606
Case 204	3.416374	25	25	25	3.621322	25	2.794647
Case 205	3.333721	25	25	25	3.534355	25	3.251896
Case 206	3.447191	25	25	25	3.368961	25	3.425808
Case 207	3.655378	25	25	25	4.144878	25	3.512219
Case 208	3.251067	25	25	25	3.407733	25	3.656164
Case 209	3.989098	25	25	25	4.552611	25	3.553661
Case 210	3.651897	25	25	25	4.068711	25	3.391282
Case 211	3.780911	25	25	27.73858	4.068711	25	3.4648
Case 212	2.570673	25	25	26.36929	4.068711	25	3.581178
Case 213	4.005532	25	25	27.73858	3.599974	25	3.516778
Case 214	3.105618	23.714348	25	27.73858	3.166172	25	3.543655
Case 215	4.305223	25	25	25	3.526595	25	3.130931
Case 216	2.348103	25	25	25	3.534355	25	3.574192
Case 217	3.572724	17.691425	20.272004	34.888663	4.552611	35	3.256427
Case 218	3.915296	19.097197	19.563041	33.519373	3.253139	35	3.139387
Case 219	3.99115	17.691425	20.438624	34.888663	4.096683	35	3.375061
Case 220	3.259918	19.097197	19.396421	33.519373	3.447389	35	3.008428
Case 221	3.441658	17.691425	20.438624	32.150083	3.534355	35	2.520648
Case 222	3.344622	17.691425	20.272004	34.888663	3	35	2.860613
Case 223	3.874466	19.097197	22.176923	32.150083	4	33.351513	3.253435
Case 224	3.208187	17.691425	20.438624	34.888663	3.679233	35	2.808635
Case 225	4.432808	17.571305	20.272004	32.150083	4.175889	35	2.765654

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#### Index Values for Latent Variables

	LV Index Values
Acceptance	3.675262
Adhocracy	23.439393
Clan	27.875471
Hierarchy	25.884086
Importance	3.882246
Market	22.879399
Use	3.513889



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## Bootstrapping

## Total Effects (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
Acceptance -> Use	0.000001	-0.000005	0.000072	0.000072	0.008597
Adhocracy -> Acceptance	0.00033	-0.000003	0.00086	0.00086	0.383104
Adhocracy -> Importance	-0.002681	-0.002569	0.008153	0.008153	0.328903
Adhocracy -> Use	0.000001	0.000005	0.000125	0.000125	0.005403
Adv PMS -> Acceptance	0.801323	0.796831	0.051418	0.051418	15.584564
Adv PMS -> Use	0	-0.000004	0.000057	0.000057	0.008722
Clan -> Acceptance	-0.000073	-0.000159	0.000776	0.000776	0.094176
Clan -> Importance	0.002757	0.003272	0.011325	0.011325	0.243438
Clan -> Use	0.000003	0.000034	0.000322	0.000322	0.009901
Fin&Cus -> Acceptance	-0.000015	-0.000022	0.00016	0.00016	0.093006
Fin&Cus -> Importance	0.347494	0.363956	0.165307	0.165307	2.102113
Fin&Cus -> Use	-0.000001	-0.000002	0.000055	0.000055	0.018833
Fin_Cus -> Use	0.328417	0.316423	0.084684	0.084684	3.878169
Financial -> Acceptance	0.296145	0.291837	0.049284	0.049284	6.008938
Financial -> Use	0	-0.000001	0.000022	0.000022	0.008435
Hierarchy -> Acceptance	-0.000104	-0.000133	0.000715	0.000715	0.14534
Hierarchy -> Importance	-0.005813	-0.003535	0.008487	0.008487	0.684892
Hierarchy -> Use	0	0.000001	0.000144	0.000144	0.001641
Importance -> Acceptance	-0.000043	-0.000056	0.000363	0.000363	0.117875
Importance -> Use	-0.000003	-0.000007	0.000162	0.000162	0.018579
Inn&Emp -> Acceptance	-0.000021	-0.000023	0.000167	0.000167	0.123458
Inn&Emp -> Importance	0.480302	0.446512	0.151668	0.151668	3.166792
Inn&Emp -> Use	-0.000001	-0.000003	0.000073	0.000073	0.019826
Inn_Emp -> Use	0.700913	0.673722	0.051629	0.051629	13.576078
Market -> Acceptance	-0.000057	-0.000106	0.000608	0.000608	0.093595
Market -> Importance	-0.005137	-0.003006	0.008512	0.008512	0.603503
Market -> Use	0.000004	0.000012	0.000231	0.000231	0.015533
Acceptance	0.245956	0.24083	0.061278	0.061278	4.013742
Non-financial -> Use	0	-0.000001	0.000018	0.000018	0.008411
Qual&Com -> Acceptance	-0.000025	-0.000033	0.0002	0.0002	0.125879
Qual&Com -> Importance	0.587739	0.553204	0.12382	0.12382	4.746707
Qual&Com -> Use	-0.000002	-0.000004	0.000099	0.000099	0.017787
Qual_Comm -> Use	0.403038	0.409773	0.067046	0.067046	6.011405

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## Path Coefficients (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
Acceptance -> Use	0.000001	-0.000005	0.000072	0.000072	0.008597
Adhocracy -> Acceptance	0.00033	-0.000003	0.000861	0.000861	0.382827
Adhocracy -> Importance	-0.002681	-0.002569	0.008153	0.008153	0.328903
Adhocracy -> Use	0.000001	0.000005	0.000125	0.000125	0.005336
Adv PMS -> Acceptance	0.801323	0.796831	0.051418	0.051418	15.584564
Clan -> Acceptance	-0.000073	-0.000159	0.000776	0.000776	0.094034
Clan -> Importance	0.002757	0.003272	0.011325	0.011325	0.243438
Clan -> Use	0.000003	0.000034	0.000322	0.000322	0.00991
Fin&Cus -> Importance	0.347494	0.363956	0.165307	0.165307	2.102113
Fin_Cus -> Use	0.328417	0.316423	0.084684	0.084684	3.878169
Financial -> Acceptance	0.296145	0.291837	0.049284	0.049284	6.008938
Hierarchy -> Acceptance	-0.000104	-0.000133	0.000716	0.000716	0.14558
Hierarchy -> Importance	-0.005813	-0.003535	0.008487	0.008487	0.684892
Hierarchy -> Use	0	0.000001	0.000144	0.000144	0.001524
Importance -> Acceptance	-0.000043	-0.000056	0.000363	0.000363	0.117875
Importance -> Use	-0.000003	-0.000007	0.000162	0.000162	0.01858
Inn&Emp -> Importance	0.480302	0.446512	0.151668	0.151668	3.166792
Inn_Emp -> Use	0.700913	0.673722	0.051629	0.051629	13.576078
Market -> Acceptance	-0.000057	-0.000106	0.000608	0.000608	0.093888
Market -> Importance	-0.005137	-0.003006	0.008512	0.008512	0.603503
Market -> Use	0.000004	0.000012	0.00023	0.00023	0.015526
Acceptance	0.245956	0.24083	0.061278	0.061278	4.013742
Qual&Com -> Importance	0.587739	0.553204	0.12382	0.12382	4.746707
Qual_Comm -> Use	0.403038	0.409773	0.067046	0.067046	6.011405

## Outer Weights (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
AC1 <- Adhocracy	0.4093	0.270775	0.314191	0.314191	1.302713
AC2 <- Adhocracy	0.220741	0.227037	0.246167	0.246167	0.896715
AC3 <- Adhocracy	0.487776	0.298614	0.412172	0.412172	1.183427
AC6 <- Adhocracy	0.123294	0.166635	0.2868	0.2868	0.429897
ACC1 <- Financial	1	1	0		
ACC1 <- Acceptance	0.296145	0.291824	0.049283	0.049283	6.00907
ACC2 <- Non-financial	1	1	0		
ACC2 <- Acceptance	0.245989	0.240826	0.061272	0.061272	4.014725
ACC3 <- Adv PMS	0.466551	0.466667	0.041359	0.041359	11.280432
ACC3 <- Acceptance	0.372621	0.37095	0.038346	0.038346	9.717222
ACC4 <- Adv PMS	0.464887	0.463778	0.045731	0.045731	10.165632
ACC4 <- Acceptance	0.372157	0.369616	0.040721	0.040721	9.139281
ACC5 <- Adv PMS	0.471811	0.470091	0.041718	0.041718	11.309615
ACC5 <- Acceptance	0.379591	0.374526	0.037913	0.037913	10.012077
CC1 <- Clan	0.223432	0.220641	0.061564	0.061564	3.629293

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
CC2 <- Clan	0.191157	0.188328	0.063942	0.063942	2.989529
CC3 <- Clan	0.309901	0.304452	0.075351	0.075351	4.112765
CC4 <- Clan	0.216412	0.1984	0.085599	0.085599	2.528202
CC5 <- Clan	0.159989	0.169718	0.064678	0.064678	2.473608
CC6 <- Clan	0.195898	0.197048	0.055638	0.055638	3.520916
HC1 <- Hierarchy	0.380411	0.337945	0.174193	0.174193	2.183848
HC3 <- Hierarchy	0.366935	0.379782	0.173955	0.173955	2.109371
HC4 <- Hierarchy	0.33342	0.268879	0.214449	0.214449	1.55477
HC5 <- Hierarchy	0.257327	0.254237	0.157697	0.157697	1.631778
MC2 <- Market	0.35068	0.372184	0.220104	0.220104	1.593246
MC3 <- Market	0.556513	0.39499	0.343644	0.343644	1.619446
MC4 <- Market	0.360981	0.357759	0.214282	0.214282	1.684603
PI1 -> Importance	0.277678	0.299971	0.157323	0.157323	1.765025
PI1 -> Fin&Cus	0.749377	0.719444	0.303205	0.303205	2.471522
PI2 -> Importance	0.149308	0.125457	0.10089	0.10089	1.479917
PI2 -> Fin&Cus	0.431901	0.379382	0.296113	0.296113	1.458568
PI3 -> Importance	-0.072042	-0.098455	0.135006	0.135006	0.533621
PI3 -> Inn&Emp	-0.222664	-0.315163	0.323758	0.323758	0.687749
PI4 -> Importance	0.495833	0.435578	0.175997	0.175997	2.817287
PI4 -> Inn&Emp	1.043818	0.962645	0.210706	0.210706	4.953919
PI5 -> Importance	0.435561	0.409884	0.136054	0.136054	3.201388
PI5 -> Qual&Com	0.780401	0.77482	0.193259	0.193259	4.03811
PI6 -> Importance	0.344518	0.288633	0.158222	0.158222	2.177438
PI6 -> Qual&Com	0.542492	0.462959	0.276745	0.276745	1.960259
USE1 -> Fin_Cus	-0.819619	-0.457473	0.486998	0.486998	1.683002
USE1 -> Use	-0.269179	-0.160733	0.167043	0.167043	1.611438
USE2 -> Use	-0.16388	0.062249	0.220788	0.220788	0.74225
USE2 -> Fin_Cus	-0.499008	0.204028	0.701165	0.701165	0.711684
USE3 -> Use	0.521261	0.503903	0.233496	0.233496	2.232422
USE3 -> Inn_Emp	0.743679	0.752002	0.337862	0.337862	2.20113
USE4 -> Use	0.339654	-0.0411	0.407002	0.407002	0.834527
USE4 -> Inn_Emp	0.4846	-0.045445	0.591635	0.591635	0.819086
USE5 -> Use	0.2699	0.294369	0.139924	0.139924	1.928909
USE5 -> Qual_Comm	0.66966	0.721904	0.318555	0.318555	2.102182
USE6 -> Qual_Comm	0.72105	0.188039	0.578952	0.578952	1.24544
USE6 -> Use	0.290608	0.068844	0.246423	0.246423	1.179308

#### Outer Loadings (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
AC1 <- Adhocracy	0.822416	0.61501	0.413268	0.413268	1.990031
AC2 <- Adhocracy	0.751473	0.614232	0.375859	0.375859	1.999349
AC3 <- Adhocracy	0.856559	0.623585	0.484611	0.484611	1.767521
AC6 <- Adhocracy	0.646379	0.542227	0.400818	0.400818	1.612651
ACC1 <- Financial	1	1	0		
ACC1 <- Acceptance	0.522837	0.518737	0.087308	0.087308	5.988392
ACC2 <- Non-financial	1	1	0		
ACC2 <- Acceptance	0.433984	0.42724	0.110167	0.110167	3.939315
ACC3 <- Adv_PMS	0.717116	0.715864	0.055244	0.055244	12.980989
ACC3 <- Acceptance	0.655013	0.653734	0.063081	0.063081	10.383599
ACC4 <- Adv_PMS	0.701102	0.697818	0.05922	0.05922	11.838912
ACC4 <- Acceptance	0.652677	0.649648	0.067768	0.067768	9.631012
ACC5 <- Adv_PMS	0.719557	0.71731	0.051143	0.051143	14.06944
ACC5 <- Acceptance	0.662397	0.658425	0.062418	0.062418	10.612256
CC1 <- Clan	0.776955	0.764324	0.108611	0.108611	7.153541
CC2 <- Clan	0.754539	0.743048	0.10475	0.10475	7.203256
CC3 <- Clan	0.834935	0.823776	0.113659	0.113659	7.345932
CC4 <- Clan	0.74521	0.725236	0.117816	0.117816	6.325215
CC5 <- Clan	0.731067	0.722884	0.106359	0.106359	6.873551
CC6 <- Clan	0.741128	0.731505	0.101728	0.101728	7.285416
HC1 <- Hierarchy	0.751828	0.688386	0.231966	0.231966	3.241118
HC3 <- Hierarchy	0.760294	0.733482	0.212753	0.212753	3.573592
HC4 <- Hierarchy	0.729507	0.649524	0.255028	0.255028	2.860496
HC5 <- Hierarchy	0.745302	0.698517	0.219947	0.219947	3.388553
MC2 <- Market	0.733099	0.690088	0.276708	0.276708	2.649357
MC3 <- Market	0.846923	0.692927	0.378563	0.378563	2.237203
MC4 <- Market	0.752375	0.691291	0.297188	0.297188	2.531647
PI1 -> Importance	0.508372	0.520548	0.202387	0.202387	2.511881
PI1 -> Fin&Cus	0.917449	0.866559	0.23494	0.23494	3.905041
PI2 -> Importance	0.40091	0.376274	0.141338	0.141338	2.836535
PI2 -> Fin&Cus	0.72351	0.655807	0.226313	0.226313	3.196946
PI3 -> Importance	0.060121	0.00837	0.209088	0.209088	0.287539
PI3 -> Inn&Emp	0.089762	-0.025028	0.347552	0.347552	0.25827
PI4 -> Importance	0.654436	0.568587	0.221193	0.221193	2.958658
PI4 -> Inn&Emp	0.977169	0.866867	0.255278	0.255278	3.827862
PI5 -> Importance	0.690054	0.659926	0.155163	0.155163	4.447277
PI5 -> Qual&Com	0.842346	0.826165	0.176447	0.176447	4.773935
PI6 -> Importance	0.51741	0.443703	0.211083	0.211083	2.451214
PI6 -> Qual&Com	0.631589	0.550853	0.263833	0.263833	2.393897
USE1 -> Fin_Cus	-0.867949	-0.441333	0.528949	0.528949	1.640892
USE1 -> Use	-0.42225	-0.240962	0.275396	0.275396	1.533246
USE2 -> Use	-0.281379	0.073117	0.37657	0.37657	0.747216
USE2 -> Fin_Cus	-0.578373	0.162286	0.730457	0.730457	0.791796
USE3 -> Use	0.725046	0.609565	0.291793	0.291793	2.484794
USE3 -> Inn_Emp	0.886289	0.745716	0.353315	0.353315	2.508493
USE4 -> Use	0.57547	0.138161	0.491341	0.491341	1.171223
USE4 -> Inn_Emp	0.703437	0.173104	0.591892	0.591892	1.188457
USE5 -> Use	0.458984	0.491767	0.215484	0.215484	2.130011
USE5 -> Qual_Comm	0.693291	0.72991	0.315533	0.315533	2.197207
USE6 -> Qual_Comm	0.742987	0.209909	0.58148	0.58148	1.277752
USE6 -> Use	0.491891	0.147795	0.390747	0.390747	1.258846

**Latent Variable Correlations**

	Acceptance	Adhocracy	Adv PMS	Clan	Fin&Cus	Fin_Cus	Financial
Acceptance	1						
Adhocracy	-0.053175	1					
Adv PMS	0.921544	-0.0951	1				
Clan	0.083951	-0.013407	0.111662	1			
Fin&Cus	0.303885	-0.133166	0.289475	0.167923	1		
Fin_Cus	-0.099747	0.053928	-0.096549	-0.123047	-0.286883	1	
Financial	0.522837	0.015576	0.247079	0.034504	0.202861	-0.080607	1
Hierarchy	-0.079518	-0.402707	-0.087114	-0.656977	-0.111483	0.07508	-0.008517
Importance	0.47477	-0.093555	0.432002	0.210614	0.554116	-0.065079	0.272895
Inn&Emp	0.282974	0.010875	0.277833	0.150434	0.078962	0.172121	0.106914
Inn_Emp	-0.01782	0.140393	-0.031181	0.324767	0.063806	0.064397	0.019557
Market	-0.035608	-0.374902	-0.036582	-0.653938	-0.027188	0.058664	-0.044822
Non-financial	0.433984	0.073266	0.191484	-0.064095	0.048581	0.00621	0.116719
Qual&Com	0.391123	-0.091967	0.329206	0.119164	0.284292	-0.093855	0.260038
Qual_Comm	-0.104401	0.069414	-0.116782	0.254622	-0.065113	0.280224	0.003278
Use	-0.087328	0.14409	-0.100632	0.289845	-0.075738	0.486495	-0.011444

	Hierarchy	Importance	Inn&Emp	Inn_Emp	Market	Non-financial	Qual&Com	Qual_Comm	Use
Acceptance									
Adhocracy									
Adv PMS									
Clan									
Fin&Cus									
Fin_Cus									
Financial									
Hierarchy	1								
Importance	-0.153589	1							
Inn&Emp	-0.088804	0.669725	1						
Inn_Emp	-0.275157	0.12948	0.151293	1					
Market	0.333819	-0.095838	-0.101214	-0.272995	1				
Non-financial	-0.028408	0.194537	0.116887	0.006137	0.029043	1			
Qual&Com	-0.108786	0.819209	0.273186	0.041831	-0.050876	0.204575	1		
Qual_Comm	-0.138079	0.16513	0.10042	0.238221	-0.244921	-0.047944	0.229965	1	
Use	-0.223855	0.135932	0.203041	0.818074	-0.270791	-0.012982	0.091179	0.662041	1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			Tolerance
1	(Constant)	-1.038E-5	.057		.000	1.000	
	Clan	.108	.148	.108	.730	.466	.151
	Adhocracy	.124	.101	.124	1.227	.221	.324
	Market	.052	.112	.052	.466	.642	.263
	Hierarchy	.148	.116	.148	1.275	.204	.244
	Acceptance	.517	.066	.517	7.801	.000	.748
	Importance	.040	.068	.040	.596	.552	.716
	Use	.026	.062	.026	.426	.671	.856

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics
		VIF
1	(Constant)	
	Clan	6.638
	Adhocracy	3.090
	Market	3.808
	Hierarchy	4.094
	Acceptance	1.336
	Importance	1.396
	Use	1.168

a. Dependent Variable: FinancialACC

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## Structural Model Specification

### PLS

#### Quality Criteria

##### Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
Acceptance	1	1	0.22553	1	1	-0.000311
Adhocracy-Market	0.663442	0.106303		-1.199505	0.663443	
Clan-Hierarchy	0.826164	0.006936		-3.830539	0.826164	
Importance	1	1	0.046883	1	1	-0.014942
USE	1	1	0.138854	1	1	-0.003336

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##### Redundancy

	redundancy
Acceptance	-0.000311
Adhocracy-Market	
Clan-Hierarchy	
Importance	-0.014942
USE	-0.003336

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##### Cronbachs Alpha

	Cronbachs Alpha
Acceptance	1
Adhocracy-Market	-1.199505
Clan-Hierarchy	-3.830539
Importance	1
USE	1

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##### Latent Variable Correlations

	Acceptance	Adhocracy-Market	Clan-Hierarchy	Importance	USE
Acceptance	1				
Adhocracy-Market	-0.009848	1			
Clan-Hierarchy	0.089953	-0.522761	1		
Importance	0.474767	-0.044193	0.203799	1	
USE	-0.08733	-0.270721	0.286424	0.135928	1

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## R Square

	R Square
Acceptance	0.22553
Adhocracy-Market	
Clan-Hierarchy	
Importance	0.046883
USE	0.138854

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## Cross Loadings

	Acceptance	Adhocracy-Market	Clan-Hierarchy	Importance	USE
Use	-0.08733	-0.270721	0.286424	0.135928	1
Clan	0.083948	-0.524737	0.93324	0.210609	0.289841
Market	-0.035609	0.943617	-0.564628	-0.095833	-0.270787
Acceptance	1	-0.009848	0.089953	0.474767	-0.08733
Adhocracy	-0.05317	-0.660659	0.183585	-0.093556	0.144091
Hierarchy	-0.079514	0.414108	-0.883963	-0.153582	-0.223854
Importance	0.474767	-0.044193	0.203799	1	0.135928

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## AVE

	AVE
Acceptance	1
Adhocracy-Market	0.663442
Clan-Hierarchy	0.826164
Importance	1
USE	1

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## Communality

	communality
Acceptance	1
Adhocracy-Market	0.663443
Clan-Hierarchy	0.826164
Importance	1
USE	1

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## Total Effects

	Acceptance	Adhocracy-Market	Clan-Hierarchy	Importance	USE
Acceptance					-0.192031
Adhocracy-Market	0.051155			0.08579	-0.166487

<b>Clan-Hierarchy</b>	0.116695			0.248647	0.199391
<b>Importance</b>	0.475541				0.09226
<b>USE</b>					

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### Composite Reliability

	Composite Reliability
<b>Acceptance</b>	1
<b>Adhocracy-Market</b>	0.106303
<b>Clan-Hierarchy</b>	0.006936
<b>Importance</b>	1
<b>USE</b>	1

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### Outer Loadings

	Acceptance	Adhocracy-Market	Clan-Hierarchy	Importance	USE
<b>Use</b>					1
<b>Clan</b>			0.93324		
<b>Market</b>		0.943617			
<b>Acceptance</b>	1				
<b>Adhocracy</b>		-0.660659			
<b>Hierarchy</b>			-0.883963		
<b>Importance</b>				1	

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### Outer Model (Weights or Loadings)

	Acceptance	Adhocracy-Market	Clan-Hierarchy	Importance	USE
<b>Use</b>					1
<b>Clan</b>			0.93324		
<b>Market</b>		0.943617			
<b>Acceptance</b>	1				
<b>Adhocracy</b>		-0.660659			
<b>Hierarchy</b>			-0.883963		
<b>Importance</b>				1	

### Path Coefficients

	Acceptance	Adhocracy-Market	Clan-Hierarchy	Importance	USE
<b>Acceptance</b>					-0.192031
<b>Adhocracy-Market</b>	0.010359			0.08579	-0.172413
<b>Clan-Hierarchy</b>	-0.001547			0.248647	0.176154
<b>Importance</b>	0.475541				0.183578
<b>USE</b>					



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## Structural Model Specification

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### PLS

#### Quality Criteria

##### Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
Acceptance	1	1	0.226418	1	1	-0.013963
Clan Adhocracy	0.497915	0.562962		-0.027173	0.497915	
Hierarchy-Market	0.666886	0.800152		0.500547	0.666886	
Importance	1	1	0.038236	1	1	0.033908
USE	1	1	0.135622	1	1	-0.003351

##### Redundancy

	redundancy
Acceptance	-0.013963
Clan Adhocracy	
Hierarchy-Market	
Importance	0.033908
USE	-0.003351

##### Cronbachs Alpha

	Cronbachs Alpha
Acceptance	1
Clan Adhocracy	-0.027173
Hierarchy-Market	0.500547
Importance	1
USE	1

### Latent Variable Correlations

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Acceptance	1				
Clan Adhocracy	0.074268	1			
Hierarchy-Market	-0.070159	-0.871562	1		
Importance	0.474767	0.192861	-0.152276	1	
USE	-0.08733	0.310199	-0.303184	0.135928	1

### R Square

	R Square
Acceptance	0.226418
Clan Adhocracy	
Hierarchy-Market	
Importance	0.038236
USE	0.135622

### Cross Loadings

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Use	-0.08733	0.310199	-0.303184	0.135928	1
Clan	0.083948	0.986441	-0.802571	0.210609	0.289841
Market	-0.035609	-0.708043	0.821516	-0.095833	-0.270787
Acceptance	1	0.074268	-0.070159	0.474767	-0.08733
Adhocracy	-0.05317	0.150882	-0.475878	-0.093556	0.144091
Hierarchy	-0.079514	-0.715613	0.811716	-0.153582	-0.223854
Importance	0.474767	0.192861	-0.152276	1	0.135928

### AVE

	AVE
Acceptance	1
Clan Adhocracy	0.497915

<b>Hierarchy-Market</b>	0.666886
<b>Importance</b>	1
<b>USE</b>	1

### Communality

	<b>communality</b>
<b>Acceptance</b>	1
<b>Clan Adhocracy</b>	0.497915
<b>Hierarchy-Market</b>	0.666886
<b>Importance</b>	1
<b>USE</b>	1

### Total Effects

	<b>Acceptance</b>	<b>Clan Adhocracy</b>	<b>Hierarchy-Market</b>	<b>Importance</b>	<b>USE</b>
<b>Acceptance</b>					-0.192102
<b>Clan Adhocracy</b>	0.054578			0.250198	0.191178
<b>Hierarchy-Market</b>	-0.022591			0.065786	-0.13656
<b>Importance</b>	0.479121				0.081374
<b>USE</b>					

### Composite Reliability

	<b>Composite Reliability</b>
<b>Acceptance</b>	1
<b>Clan Adhocracy</b>	0.562962
<b>Hierarchy-Market</b>	0.800152
<b>Importance</b>	1
<b>USE</b>	1

### Outer Loadings

	<b>Acceptance</b>	<b>Clan Adhocracy</b>	<b>Hierarchy-Market</b>	<b>Importance</b>	<b>USE</b>
<b>Use</b>					1

<b>Clan</b>		0.986441			
<b>Market</b>			0.821516		
<b>Acceptance</b>	1				
<b>Adhocracy</b>		0.150882			
<b>Hierarchy</b>			0.811716		
<b>Importance</b>				1	

### Outer Model (Weights or Loadings)

	<b>Acceptance</b>	<b>Clan Adhocracy</b>	<b>Hierarchy-Market</b>	<b>Importance</b>	<b>USE</b>
<b>Use</b>					1
<b>Clan</b>		0.986441			
<b>Market</b>			0.821516		
<b>Acceptance</b>	1				
<b>Adhocracy</b>		0.150882			
<b>Hierarchy</b>			0.811716		
<b>Importance</b>				1	

### Path Coefficients

	<b>Acceptance</b>	<b>Clan Adhocracy</b>	<b>Hierarchy-Market</b>	<b>Importance</b>	<b>USE</b>
<b>Acceptance</b>					-0.192102
<b>Clan Adhocracy</b>	-0.065297			0.250198	0.158275
<b>Hierarchy-Market</b>	-0.054111			0.065786	-0.152308
<b>Importance</b>	0.479121				0.173414
<b>USE</b>					

### Outer Weights

	<b>Acceptance</b>	<b>Clan Adhocracy</b>	<b>Hierarchy-Market</b>	<b>Importance</b>	<b>USE</b>
<b>Use</b>					1
<b>Clan</b>		0.988641			
<b>Market</b>			0.619595		
<b>Acceptance</b>	1				
<b>Adhocracy</b>		0.164131			
<b>Hierarchy</b>			0.604883		
<b>Importance</b>				1	

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## Structural Model Specification

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### PLS

#### Quality Criteria

##### Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
Acceptance	1	1	0.225817	1	1	-0.003872
Clan-Market	0.824838	0.006396		-3.779302	0.824838	
Hierarchy-Adhocracy	0.650961	0.176368		-1.348436	0.650963	
Importance	1	1	0.03149	1	1	0.03081
USE	1	1	0.136482	1	1	-0.003313

##### Redundancy

	redundancy
Acceptance	-0.003872
Clan-Market	
Hierarchy-Adhocracy	
Importance	0.03081
USE	-0.003313

##### Cronbachs Alpha

	Cronbachs Alpha
Acceptance	1
Clan-Market	-3.779302
Hierarchy-Adhocracy	-1.348436
Importance	1
USE	1

## Latent Variable Correlations

	Acceptance	Clan-Market	Hierarchy-Adhocracy	Importance	USE
Acceptance	1				
Clan-Market	0.068945	1			
Hierarchy-Adhocracy	-0.057654	-0.539641	1		
Importance	0.474767	0.17609	-0.113507	1	
USE	-0.08733	0.309053	-0.231289	0.135928	1

## R Square

	R Square
Acceptance	0.225817
Clan-Market	
Hierarchy-Adhocracy	
Importance	0.03149
USE	0.136482

## Cross Loadings

	Acceptance	Clan-Market	Hierarchy-Adhocracy	Importance	USE
Use	-0.08733	0.309053	-0.231289	0.135928	1
Clan	0.083948	0.93164	-0.576364	0.210609	0.289841
Market	-0.035609	-0.884151	0.382479	-0.095833	-0.270787
Acceptance	1	0.068945	-0.057654	0.474767	-0.08733
Adhocracy	-0.05317	0.171794	-0.590006	-0.093556	0.144091
Hierarchy	-0.079514	-0.566052	0.976635	-0.153582	-0.223854
Importance	0.474767	0.17609	-0.113507	1	0.135928

## AVE

	AVE
Acceptance	1
Clan-Market	0.824838
Hierarchy-Adhocracy	0.650961

<b>Importance</b>	1
<b>USE</b>	1

### Communality

	<b>communality</b>
<b>Acceptance</b>	1
<b>Clan-Market</b>	0.824838
<b>Hierarchy-Adhocracy</b>	0.650963
<b>Importance</b>	1
<b>USE</b>	1

### Total Effects

	<b>Acceptance</b>	<b>Clan-Market</b>	<b>Hierarchy-Adhocracy</b>	<b>Importance</b>	<b>USE</b>
<b>Acceptance</b>					-0.191925
<b>Clan-Market</b>	0.053376			0.162019	0.259937
<b>Hierarchy-Adhocracy</b>	-0.02885			-0.026075	-0.091016
<b>Importance</b>	0.477118				0.08242
<b>USE</b>					

### Composite Reliability

	<b>Composite Reliability</b>
<b>Acceptance</b>	1
<b>Clan-Market</b>	0.006396
<b>Hierarchy-Adhocracy</b>	0.176368
<b>Importance</b>	1
<b>USE</b>	1

### Outer Loadings

	<b>Acceptance</b>	<b>Clan-Market</b>	<b>Hierarchy-Adhocracy</b>	<b>Importance</b>	<b>USE</b>
<b>Use</b>					1
<b>Clan</b>		0.93164			
<b>Market</b>		-0.884151			

Acceptance	1				
Adhocracy			-0.590006		
Hierarchy			0.976635		
Importance				1	

### Outer Model (Weights or Loadings)

	Acceptance	Clan-Market	Hierarchy-Adhocracy	Importance	USE
Use					1
Clan		0.93164			
Market		-0.884151			
Acceptance	1				
Adhocracy			-0.590006		
Hierarchy			0.976635		
Importance				1	

### Path Coefficients

	Acceptance	Clan-Market	Hierarchy-Adhocracy	Importance	USE
Acceptance					-0.191925
Clan-Market	-0.023926			0.162019	0.241991
Hierarchy-Adhocracy	-0.01641			-0.026075	-0.092017
Importance	0.477118				0.173991
USE					

### Outer Weights

	Acceptance	Clan-Market	Hierarchy-Adhocracy	Importance	USE
Use					1
Clan		0.617543			
Market		-0.480316			
Acceptance	1				
Adhocracy			-0.234792		
Hierarchy			0.882081		
Importance				1	



## PLS

### Quality Criteria

#### Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
Acceptance	1	1	0.226001	1	1	-0.008632
Clan Adhocracy	1	1		1	1	
Hierarchy-Market	0.666886	0.800152		0.500547	0.666886	
Importance	1	1	0.045145	1	1	0.042929
USE	1	1	0.133345	1	1	-0.003616

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#### Redundancy

	redundancy
Acceptance	-0.008632
Clan Adhocracy	
Hierarchy-Market	
Importance	0.042929
USE	-0.003616

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#### Cronbachs Alpha

	Cronbachs Alpha
Acceptance	1
Clan Adhocracy	1
Hierarchy-Market	0.500547
Importance	1
USE	1

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#### Latent Variable Correlations

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Acceptance	1				
Clan Adhocracy	0.083948	1			
Hierarchy-Market	-0.070159	-0.802571	1		
Importance	0.474767	0.210609	-0.152277	1	
USE	-0.08733	0.289841	-0.303184	0.135928	1

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## R Square

	R Square
Acceptance	0.226001
Clan Adhocracy	
Hierarchy-Market	
Importance	0.045145
USE	0.133345

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## Cross Loadings

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Use	-0.08733	0.289841	-0.303184	0.135928	1
Clan	0.083948	1	-0.802571	0.210609	0.289841
Market	-0.035609	-0.653937	0.821514	-0.095833	-0.270787
Acceptance	1	0.083948	-0.070159	0.474767	-0.08733
Hierarchy	-0.079514	-0.656979	0.811718	-0.153582	-0.223854
Importance	0.474767	0.210609	-0.152277	1	0.135928

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## AVE

	AVE
Acceptance	1
Clan Adhocracy	1
Hierarchy-Market	0.666886
Importance	1
USE	1

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## Communality

	communality
Acceptance	1
Clan Adhocracy	1
Hierarchy-Market	0.666886
Importance	1
USE	1

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## Total Effects

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Acceptance					-0.193362
Clan Adhocracy	0.077667			0.248387	0.130704
Hierarchy-Market	-0.007826			0.047072	-0.198285
Importance	0.478835				0.081904
USE					

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## Composite Reliability

	Composite Reliability
Acceptance	1
Clan Adhocracy	1
Hierarchy-Market	0.800152
Importance	1
USE	1

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## Calculation Results

### Stop Criterion Changes

	Use	Clan	Market	Acceptance	Hierarchy	Importance
Iteration 0	1	1	1	1	1	1
Iteration 1	1	1	0.619425	1	0.605054	1
Iteration 2	1	1	0.619591	1	0.604887	1
Iteration 3	1	1	0.619594	1	0.604883	1

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## Outer Loadings

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Use					1
Clan		1			
Market			0.821514		
Acceptance	1				
Hierarchy			0.811718		
Importance				1	

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## Outer Model (Weights or Loadings)

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Use					1
Clan		1			
Market			0.821514		
Acceptance	1				
Hierarchy			0.811718		
Importance				1	

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## Path Coefficients

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Acceptance					-0.193362
Clan Adhocracy	-0.041269			0.248387	0.10238
Hierarchy-Market	-0.030365			0.047072	-0.208012
Importance	0.478835				0.174493
USE					

## Outer Weights

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
Use					1
Clan		1			
Market			0.619594		
Acceptance	1				

<b>Hierarchy</b>			0.604883		
<b>Importance</b>				1	

## Index Values

### Results

#### Measurement Model (restandardised)

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
<b>Use</b>					0.999999
<b>Clan</b>		0.999999			
<b>Market</b>			0.821519		
<b>Acceptance</b>	0.999998				
<b>Hierarchy</b>			0.811716		
<b>Importance</b>				1	

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### Path Coefficients

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
<b>Acceptance</b>					-0.193362
<b>Clan Adhocracy</b>	-0.041269			0.248387	0.10238
<b>Hierarchy-Market</b>	-0.049594			0.076879	-0.339732
<b>Importance</b>	0.478836				0.174493
<b>USE</b>					

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### Measurement Model

	Acceptance	Clan Adhocracy	Hierarchy-Market	Importance	USE
<b>Use</b>					1
<b>Clan</b>		1			
<b>Market</b>			0.503001		
<b>Acceptance</b>	1				
<b>Hierarchy</b>			0.496999		
<b>Importance</b>				1	

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## Table of contents (complete)

## Total Effects (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
Acceptance -> USE	-0.192603	-0.190361	0.066606	0.066606	2.891678
Clan -> Acceptance	0.076661	0.074873	0.104163	0.104163	0.735976
Clan -> Importance	0.247087	0.244505	0.107274	0.107274	2.303316
Clan -> USE	0.131748	0.126849	0.113231	0.113231	1.163529
Hierarchy -> Acceptance	-0.038261	-0.03665	0.082571	0.082571	0.463366
Hierarchy -> Importance	-0.014854	-0.012905	0.092475	0.092475	0.160622
Hierarchy -> USE	-0.085154	-0.088026	0.089024	0.089024	0.95653
Importance -> Acceptance	0.478092	0.478769	0.05206	0.05206	9.183561
Importance -> USE	0.084133	0.084451	0.057109	0.057109	1.473187
Market -> Acceptance	0.027295	0.02395	0.081394	0.081394	0.335345
Market -> Importance	0.070705	0.068003	0.082211	0.082211	0.860045
Market -> USE	-0.156206	-0.157086	0.089362	0.089362	1.74801

## Path Coefficients (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
Acceptance -> USE	-0.192603	-0.190361	0.066606	0.066606	2.891678
Clan -> Acceptance	-0.041469	-0.0417	0.092061	0.092061	0.450455
Clan -> Importance	0.247087	0.244505	0.107274	0.107274	2.303316
Clan -> USE	0.102972	0.098306	0.110388	0.110388	0.932819
Hierarchy -> Acceptance	-0.031159	-0.030359	0.073928	0.073928	0.421479
Hierarchy -> Importance	-0.014854	-0.012905	0.092475	0.092475	0.160622
Hierarchy -> USE	-0.089906	-0.093229	0.086358	0.086358	1.04108
Importance -> Acceptance	0.478092	0.478769	0.05206	0.05206	9.183561
Importance -> USE	0.176215	0.175784	0.065381	0.065381	2.6952
Market -> Acceptance	-0.006508	-0.008558	0.07234	0.07234	0.089969
Market -> Importance	0.070705	0.068003	0.082211	0.082211	0.860045
Market -> USE	-0.163409	-0.16434	0.087641	0.087641	1.864518

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## Structural Model Specification

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### PLS

#### Quality Criteria

##### Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
Acceptance	1	1	0.226211	1	1	-0.008682
Clan	1	1		1	1	
Hierarchy	1	1		1	1	
Importance	1	1	0.047544	1	1	0.043025
Market	1	1		1	1	
USE	1	1	0.134993	1	1	-0.003456

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##### Redundancy

	redundancy
Acceptance	-0.008682
Clan	
Hierarchy	
Importance	0.043025
Market	
USE	-0.003456

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##### Cronbachs Alpha

	Cronbachs Alpha
Acceptance	1
Clan	1
Hierarchy	1

<b>Importance</b>	1
<b>Market</b>	1
<b>USE</b>	1

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## Latent Variable Correlations

	Acceptance	Clan	Hierarchy	Importance	Market	USE
Acceptance	1					
Clan	0.083948	1				
Hierarchy	-0.079514	-0.656979	1			
Importance	0.474767	0.210609	-0.153582	1		
Market	-0.035609	-0.653937	0.33382	-0.095833	1	
USE	-0.08733	0.289841	-0.223854	0.135928	-0.270787	1

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## R Square

	R Square
Acceptance	0.226211
Clan	
Hierarchy	
Importance	0.047544
Market	
USE	0.134993

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## Cross Loadings

	Acceptance	Clan	Hierarchy	Importance	Market	USE
Use	-0.08733	0.289841	-0.223854	0.135928	-0.270787	1
Clan	0.083948	1	-0.656979	0.210609	-0.653937	0.289841
Market	-0.035609	-0.653937	0.33382	-0.095833	1	-0.270787
Acceptance	1	0.083948	-0.079514	0.474767	-0.035609	-0.08733
Hierarchy	-0.079514	-0.656979	1	-0.153582	0.33382	-0.223854
Importance	0.474767	0.210609	-0.153582	1	-0.095833	0.135928

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## AVE



	<b>AVE</b>
<b>Acceptance</b>	1
<b>Clan</b>	1
<b>Hierarchy</b>	1
<b>Importance</b>	1
<b>Market</b>	1
<b>USE</b>	1

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## Communality

	<b>communality</b>
<b>Acceptance</b>	1
<b>Clan</b>	1
<b>Hierarchy</b>	1
<b>Importance</b>	1
<b>Market</b>	1
<b>USE</b>	1

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## Total Effects

	<b>Acceptance</b>	<b>Clan</b>	<b>Hierarchy</b>	<b>Importance</b>	<b>Market</b>	<b>USE</b>
<b>Acceptance</b>						-0.192603
<b>Clan</b>	0.076661			0.247087		0.131748
<b>Hierarchy</b>	-0.038261			-0.014854		-0.085154
<b>Importance</b>	0.478092					0.084133
<b>Market</b>	0.027295			0.070705		-0.156206
<b>USE</b>						

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## Composite Reliability

	<b>Composite Reliability</b>
<b>Acceptance</b>	1
<b>Clan</b>	1
<b>Hierarchy</b>	1
<b>Importance</b>	1

<b>Market</b>	1
<b>USE</b>	1

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## Calculation Results

### Stop Criterion Changes

	Use	Clan	Market	Acceptance	Hierarchy	Importance
<b>Iteration 0</b>	1	1	1	1	1	1
<b>Iteration 1</b>	1	1	1	1	1	1

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## Outer Loadings

	Acceptance	Clan	Hierarchy	Importance	Market	USE
<b>Use</b>						1
<b>Clan</b>		1				
<b>Market</b>					1	
<b>Acceptance</b>	1					
<b>Hierarchy</b>			1			
<b>Importance</b>				1		

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## Outer Model (Weights or Loadings)

	Acceptance	Clan	Hierarchy	Importance	Market	USE
<b>Use</b>						1
<b>Clan</b>		1				
<b>Market</b>					1	
<b>Acceptance</b>	1					
<b>Hierarchy</b>			1			
<b>Importance</b>				1		

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## Path Coefficients

	Acceptance	Clan	Hierarchy	Importance	Market	USE
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<b>Acceptance</b>						-0.192603
<b>Clan</b>	-0.041469			0.247087		0.102972
<b>Hierarchy</b>	-0.031159			-0.014854		-0.089906
<b>Importance</b>	0.478092					0.176215
<b>Market</b>	-0.006508			0.070705		-0.163409
<b>USE</b>						

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## Latent Variable Scores

	<b>Acceptance</b>	<b>Clan</b>	<b>Hierarchy</b>	<b>Importance</b>	<b>Market</b>	<b>USE</b>
	-0.592998	1.226998	-1.679793	0.024593	-1.596203	1.157299
	-1.078797	0.146199	-0.446796	0.251193	-0.004993	-0.1593
	-0.776498	-1.1848	1.0307	-0.068307	1.80942	1.108999
	0.842199	2.691796	-1.208994	1.688193	-1.554403	1.024199
	-0.129199	-0.7466	0.654801	-0.624307	-0.386495	-1.584499
	1.232999	-0.224101	1.234499	0.133793	-0.012493	1.400698
	0.2394	0.403199	-0.132397	0.599793	0.127508	1.130499
	-0.732498	-1.194999	0.560401	-0.304907	1.302916	-0.5203
	0.736	0.647598	-0.857595	1.785693	-1.554403	0.179999
	-0.582298	1.558097	0.098502	1.266193	-1.834405	2.844397
	1.093499	1.508897	-0.992195	0.802193	-0.273194	0.791299
	0.183801	-0.6079	0.112102	0.220093	0.38821	0.0004
	0.239	0.973698	-1.400393	1.627993	-0.526496	0.687199
	1.557298	0.203399	1.607798	0.220093	-0.794698	-0.1543
	1.232999	0.190199	0.594801	0.220093	-1.0479	-0.5761
	-0.537798	1.556897	-0.806495	1.444193	-1.293601	-0.2656
	1.049499	0.560098	0.098502	2.086493	-1.441202	0.427499
	0.7467	-0.071701	-0.167397	0.609093	0.38821	0.106499
	-0.721298	1.137498	-0.673095	-0.337907	-0.159994	0.612599
	-1.542596	-0.139601	0.7862	-1.112807	-0.787198	0.607899
	1.137999	0.304299	-0.395696	0.520893	-0.265694	-0.4968
	0.239	-0.3485	-0.001097	-1.345507	0.248209	0.601499
	-0.582298	-0.145701	0.8211	-0.362007	-0.004993	0.0076
	-0.626298	-0.183801	-1.346694	0.220093	1.170515	-0.2038
	-0.626298	-0.148501	-0.102697	-0.147107	-0.813998	-0.4463
	-0.626298	1.636597	0.8806	-0.820507	-1.573603	1.766798
	-1.078797	-0.8205	-0.430696	0.056993	1.042215	-0.154
	-0.581798	-0.6079	0.356602	-0.519707	0.649012	0.292099
	1.243699	2.574396	-1.453493	0.966993	-1.849405	0.341899
	1.126799	-0.663	0.375402	0.678593	-0.772198	-0.706
	-0.626298	1.037798	0.638701	-1.130607	-1.032899	0.607899
	2.517597	0.947098	-0.323796	1.413193	-1.433602	-0.4253
	-0.677298	-1.252499	1.811598	-0.741607	-0.787198	-0.444
	-1.133997	0.976198	0.576601	-1.130607	-2.102607	-0.977
	-1.078797	-1.582099	2.808495	-1.725108	-0.772198	-0.2584

	-1.196197	-1.761499	3.383593	-0.379107	-0.526496	0.607899
	0.736	0.186199	0.399902	-0.331307	-1.433602	0.994699
	-0.626298	-0.023601	-1.164194	-0.331307	0.769713	0.633599
	0.2834	0.892198	-1.698593	-0.257007	0.135008	1.921398
	-1.185097	-0.6283	0.748701	-0.109407	1.302916	0.403499
	0.886199	2.427596	-0.437796	0.618393	-1.327901	-1.0773
	-0.074099	0.322899	0.262202	0.373193	-1.0672	1.053199
	1.243699	0.400299	-0.167397	0.783593	0.135008	0.106699
	-0.363798	0.333499	0.095902	0.861693	-1.320401	1.822598
	1.093499	0.009399	-0.841495	0.782893	-0.666497	1.982198
	1.199799	2.821496	-1.735593	1.609293	-1.1536	0.737699
	1.199799	2.821496	-0.788395	0.220093	-1.596203	0.737699
	0.3785	0.330199	-0.935895	1.737193	-0.159994	0.440999
	-1.089997	-0.023601	-0.876395	-0.910707	-0.273194	1.973198
	-0.688098	2.423396	-2.187091	0.122593	-0.526496	1.220099
	0.7472	3.146395	-1.453493	1.015993	-2.355908	-0.18
	-1.129897	2.071297	-1.663693	0.931193	-0.779698	-0.1543
	1.590098	0.200499	-0.490096	0.862393	-1.293601	-0.7358
	-0.257599	3.146395	-0.894595	-0.422207	-2.355908	0.427199
	-0.224799	-2.186598	2.081297	0.530993	1.80942	-0.5501
	0.7472	0.223699	-1.069794	0.298993	0.021808	0.106699
	-0.571098	0.639898	-1.873292	-1.130607	0.142508	-0.2656
	0.2283	0.585498	1.215799	1.981193	-0.934699	0.628899
	-0.074099	0.054299	0.9343	0.385293	-0.927199	-1.075
	-0.732498	-0.3636	0.146402	0.299693	-0.518896	0.439899
	-0.582298	0.080699	-1.120894	-0.410207	0.528211	0.923399
	0.3892	0.340499	-0.876395	0.298993	-0.526496	0.156199
	-0.626298	0.976998	-0.841495	-0.343307	-0.012493	-0.7615
	-0.571098	1.486297	-1.234094	0.949893	-1.596203	0.336899
	0.736	1.486297	-1.234094	0.232093	-1.596203	0.918399
	-0.732498	1.321698	-1.513493	1.046593	-1.849405	0.346899
	-1.045597	-0.181701	-0.333596	0.163293	0.38821	0.254299
	2.053797	1.262398	-0.954595	-0.226007	-0.927199	0.422199
	-0.180299	-1.282399	3.608493	-0.703207	-0.740397	-0.5739
	-0.626298	1.807497	0.139202	1.076993	-1.0479	0.527199
	-0.581798	0.400799	-1.217894	-0.856307	-0.152494	0.631699
	-1.185497	0.804498	-0.989595	-1.261207	0.029308	0.0242
	-0.732498	-1.218099	0.246102	0.347493	1.042215	-0.4145
	-1.078797	-1.1831	1.199599	-0.464507	0.781513	0.192999
	2.160097	0.619498	-0.352396	0.276893	-0.632197	-0.08
	-0.162499	1.058398	-0.726295	-0.268407	0.683312	0.687899
	-0.085299	1.177498	-0.744495	2.453794	-0.927199	1.525298
	0.3678	-0.6585	-0.169997	-0.110607	2.104422	0.398199
	0.736	1.356698	-0.954595	0.929293	-2.355908	0.503499
	-0.279499	1.448597	-1.926992	-0.471207	0.781513	0.949099
	-0.721298	-0.168801	-0.911295	-1.541007	-0.231394	-0.5999
	-0.677298	-0.4433	0.112102	-1.094807	0.38821	0.586899
	-0.224799	-1.0189	-0.760595	-1.016007	-0.779698	-0.675

	-0.615098	0.412699	-0.543196	-1.541007	-0.647197	-0.5999
	-0.827598	0.248099	-0.578196	-1.541007	-0.900399	-0.5999
	-1.056297	-0.281601	-0.183497	-2.171208	-0.125693	-0.4142
	-0.527098	1.885997	-1.725793	-1.725108	-1.040399	-0.3955
	-1.045597	0.809298	-1.233494	-0.024407	0.42251	-0.2656
	0.2834	1.584697	-3.027989	1.969193	-1.327901	-0.2028
	0.736	1.519297	-2.055692	1.561493	0.929014	1.818398
	-0.191099	-0.273601	0.504701	-0.353407	0.38821	-0.5742
	2.087097	1.756397	-1.778892	1.561493	-1.040399	-0.4142
	0.852999	-0.7869	1.0151	0.687193	-0.054293	-0.8709
	-0.224299	0.115899	-0.561996	1.640393	1.197216	1.010999
	0.3785	0.363599	-0.675195	0.220093	0.240709	0.737699
	-0.732498	-0.315401	1.645398	-0.868307	-1.0747	1.321198
	0.5965	1.397697	-0.631896	-0.177507	-0.246494	-0.0046
	0.736	0.580198	-0.546396	-0.177507	-1.834405	1.631698
	0.378	0.724798	-1.217894	-0.147107	-0.019993	0.108699
	0.820399	-0.5305	0.165202	1.609293	0.38821	-1.468099
	-0.537798	-0.6381	0.095902	-0.313507	-0.012493	-0.1335
	-0.677298	0.221099	-0.991595	-0.899307	-1.554403	0.824199
	-2.353095	0.097399	0.104902	-0.899307	-1.0479	0.607599
	-0.592998	-0.4567	0.9014	-0.898707	-0.526496	-0.2894
	0.7804	-0.9406	1.836798	1.609293	0.248209	-0.706
	-0.677298	0.747298	-1.419093	-0.752907	-0.526496	-0.6811
	0.3785	1.081798	-0.349796	-0.110607	-0.772198	-0.9916
	-0.581798	0.879898	-0.973395	-0.910707	-0.666497	0.477699
	-1.034897	-0.216001	-0.017197	-0.693107	-0.265694	0.0261
	1.060299	-0.4833	-0.543796	0.151293	-0.118193	-0.5811
	0.7028	1.387898	-1.083394	0.367793	-1.849405	-0.7407
	-0.537798	0.737398	0.001503	-0.740907	-0.526496	-0.2396
	0.4229	1.104098	-0.387296	-0.259007	0.781513	0.137199
	-2.363895	-0.083901	0.077202	-1.939308	0.127508	-0.5999
	-0.688498	1.312998	-0.444196	2.055493	-0.673997	0.286099
	0.692	-0.4433	-0.167397	-0.508907	0.38821	0.453199
	0.2834	1.442597	0.001503	-0.740907	-0.673997	-0.2656
	-0.592998	0.858698	-0.431196	0.276893	-0.004993	1.791598
	0.4229	0.239099	0.225302	0.220093	-0.934699	0.737699
	0.736	1.092698	-0.675195	0.151293	-0.772198	1.636698
	-0.626298	1.229298	0.286802	1.338893	-0.526496	-0.1593
	0.875499	-0.254601	1.758498	0.299693	-0.027493	1.283699
	-1.185097	0.285299	-0.578196	-1.297007	-0.125693	-0.5999
	-1.089997	3.146395	-0.841495	-1.151207	-1.554403	-0.4325
	-2.156595	0.433599	-1.171394	-1.939308	0.509011	-0.5999
	0.283	-0.6664	-0.349796	-0.147107	0.789013	-1.473099
	0.6742	-0.4137	0.077202	1.163193	0.501511	0.758199
	2.149397	-0.331001	0.165202	0.299693	0.275009	0.125499
	0.3785	-0.331001	0.444701	-0.268407	0.275009	-0.4101
	0.736	-0.223001	-0.631896	-0.850807	-0.265694	0.607599
	0.3785	0.160699	1.0119	-0.536807	-0.420795	0.341899

	-0.677298	-0.6735	0.619901	0.687193	0.142508	-0.5623
	0.875499	-0.133601	-0.351796	-0.110607	-0.125693	-0.3706
	-2.514095	-1.0252	1.0495	-0.693107	0.796513	0.341599
	0.2834	0.596598	0.259602	1.163193	0.275009	-0.075
	1.244199	-0.4323	-1.419093	2.055493	0.014308	1.129499
	2.149397	-0.656	0.509401	1.609293	-0.265694	0.508499
	1.232999	0.269399	0.9065	-1.218107	-0.019993	-0.8709
	1.093499	-1.0573	0.356602	0.495193	0.944014	-0.7595
	1.188599	-0.373	-0.167397	-0.110607	0.38821	-2.998298
	0.824399	-0.7562	0.305502	-0.110607	0.014308	-2.998298
	0.4229	-0.325801	0.654801	-0.110607	0.789013	-2.998298
	-0.592998	0.664898	-0.575596	0.494493	-0.787198	0.0261
	1.210499	-1.257099	-0.202297	-0.147107	0.135008	-2.149699
	-1.185097	-0.054301	0.444701	0.446693	0.909714	1.692498
	0.2615	-0.4609	0.340502	-0.226007	0.248209	-0.5742
	1.567998	-1.0027	-0.481696	-0.605707	-0.265694	-2.005999
	1.751898	-0.8769	-0.358796	0.084793	0.38821	-1.732699
	-0.677298	-0.673	-0.186097	-0.693107	0.501511	0.0261
	2.149397	-0.5846	0.227902	-0.226007	1.042215	-0.2841
	-0.475998	-0.598	0.042203	-1.781508	-0.004993	-0.4142
	-0.732498	0.135799	-0.186097	-0.772007	-1.0479	0.607599
	1.612398	0.813798	-2.68649	-0.226007	1.147915	-1.1206
	0.239	-0.3595	0.453601	0.531693	1.548618	-2.066799
	0.4974	-0.9522	0.375402	0.531693	0.501511	-1.223099
	0.2834	-0.8672	-0.578196	-0.110607	-0.919699	-0.2543
	1.634498	-0.6252	-0.280497	1.181193	-0.526496	1.806898
	0.875099	-0.331001	0.165202	2.055493	0.275009	-0.1225
	-0.582298	-0.196201	-0.183497	-0.508907	-0.012493	0.158199
	0.183801	-0.6388	0.409702	1.025593	0.142508	-0.5811
	-0.721298	-0.5923	1.686098	-1.781508	-0.666497	-1.186399
	1.060299	-0.4513	0.112102	-0.740907	0.535811	-1.1576
	-0.085299	-0.6851	0.488501	-0.740907	-0.806498	1.321198
	-1.291297	-0.6851	0.488501	0.569393	-0.806498	0.679199
	0.4225	-0.359	-0.314896	0.220093	-0.004993	0.737699
	2.009897	-0.7707	0.321702	2.055493	0.39581	0.758199
	0.2834	-0.6611	0.635501	-0.110607	1.582918	0.631699
	-0.074099	-0.4906	1.755898	0.531693	0.796513	-2.066799
	-0.732498	-0.5585	0.224702	-0.693107	-0.238894	0.447999
	0.3785	-0.6857	-0.314896	0.367793	0.248209	-0.1998
	-0.721298	-0.3418	-0.261797	1.591493	1.302916	0.348799
	-1.089997	-1.1084	1.153699	-0.740907	1.310516	-0.1335
	-1.078797	-1.375999	2.822595	-1.781508	-0.666497	-0.8101
	-0.677298	-1.337599	-0.483796	-0.098607	1.450517	-1.348199
	0.217101	0.039799	-0.666196	-1.414307	0.894714	0.297099
	1.244199	-1.240499	1.382099	0.587393	2.217622	-1.0773
	0.6409	-1.499799	1.382099	0.531693	2.217622	-2.998298
	1.383198	-1.1706	1.382099	1.423893	2.217622	-2.051799
	0.6298	-0.3708	1.529598	0.531693	0.501511	-2.066799

	-0.721298	-1.417299	0.9964	-1.335407	1.964421	0.0261
	0.2502	-1.0451	0.506701	1.181193	0.902214	-0.5811
	1.199799	-0.7375	-0.167397	0.666193	0.37321	0.0283
	0.875499	-1.205499	1.382099	0.446693	2.217622	0.158199
	1.685598	-0.183501	1.215799	1.413193	0.248209	-1.0562
	-1.637696	-0.5305	0.767401	-1.939308	-0.133193	-0.4142
	-0.074099	-0.5305	0.767401	0.446693	-0.133193	1.159599
	-0.688498	-0.5305	0.444701	-0.508907	0.38821	1.183799
	1.740798	-0.6079	0.391502	-0.740907	0.38821	-0.5761
	-2.039596	-0.6079	-0.167397	-2.013508	0.38821	-1.162599
	-1.185097	-0.278701	-0.167397	0.220093	0.38821	0.737699
	-0.191099	-0.278701	0.112102	1.338893	0.38821	0.645799
	0.2502	-0.7725	0.391502	0.288893	0.38821	2.375298
	-1.185097	-0.4433	-0.167397	-0.617707	0.38821	1.636898
	-0.257599	-0.6079	0.391502	-0.091407	0.38821	-0.6852
	-0.677298	-0.4433	-0.167397	-1.939308	0.38821	1.369698
	-0.677298	-0.4433	0.112102	-0.983707	0.38821	-1.1121
	0.2723	-0.4433	0.112102	-0.519707	0.38821	1.526698
	-1.185097	-0.4433	0.112102	-0.741607	0.38821	0.336599
	0.736	-0.4433	-0.167397	1.181193	0.38821	1.806898
	0.736	-0.4433	-0.167397	1.413193	0.38821	0.0521
	-0.626298	-0.5305	0.488001	-0.740907	-0.133193	-0.3905
	0.2723	-0.5305	0.488001	1.413193	-0.133193	0.739699
	-2.039596	-0.5305	0.321702	-1.781508	-0.133193	-0.5554
	-0.732498	-0.5305	0.321702	-0.740907	-0.133193	0.0054
	-0.527098	-0.4433	-0.167397	-0.508907	0.38821	-1.191699
	-0.677298	-0.4433	-0.167397	-0.740907	0.38821	-0.0988
	-0.626298	-0.4433	-0.167397	-0.983707	0.38821	0.429499
	-0.118499	-0.4433	-0.167397	0.813893	0.38821	-0.5761
	-0.827598	-0.4433	-0.167397	-1.414307	0.38821	0.607599
	0.7467	-0.4433	-0.167397	1.413193	0.38821	0.349899
	-0.074099	-0.4433	-0.167397	0.531693	0.38821	0.482699
	0.239	-0.4433	0.391502	0.531693	0.38821	0.323099
	-2.558495	-0.4433	0.112102	0.531693	0.38821	-1.337999
	0.7028	-0.4433	0.391502	-0.509607	0.38821	0.0261
	-1.096697	-0.4433	0.391502	-1.939308	0.38821	0.873599
	1.338799	-0.4433	-0.167397	-1.130607	0.38821	-0.706
	-3.011094	-0.4433	-0.167397	-0.740907	0.38821	-0.106
	-0.268699	-1.240499	1.661498	1.413193	2.217622	-1.162599
	0.5746	-1.335199	1.382099	-1.707308	2.217622	0.167199
	0.7579	-1.205499	1.661498	0.151293	2.217622	0.733599
	-0.849498	-1.370099	1.382099	-0.972907	2.217622	-1.207099
	-0.592998	-1.205499	1.1026	-0.740907	2.217622	-2.520898
	-0.688098	-1.240499	1.661498	-2.013508	2.217622	-0.9957
	0.3785	-0.9287	1.1026	0.220093	1.956921	-0.2048
	-1.034897	-1.205499	1.661498	-0.147107	2.217622	-0.6987
	1.707498	-1.240499	1.1026	-0.006407	2.217622	-1.518699

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			Tolerance
1	(Constant)	-4.365E-6	.059		.000	1.000	
	Clan	-.041	.100	-.041	-.413	.680	.348
	Hierarchy	-.031	.080	-.031	-.391	.696	.552
	Market	-.007	.079	-.007	-.082	.935	.555
	Importance	.478	.061	.478	7.885	.000	.952

### Coefficients<sup>a</sup>

Model		Collinearity Statistics
		VIF
1	(Constant)	
	Clan	2.875
	Hierarchy	1.811
	Market	1.803
	Importance	1.050

a. Dependent Variable: Acceptance



### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			Tolerance
1	(Constant)	7.353E-6	.066		.000	1.000	
	Clan	.247	.110	.247	2.250	.025	.356
	Hierarchy	-.015	.088	-.015	-.169	.866	.552
	Market	.071	.088	.071	.805	.422	.556

### Coefficients<sup>a</sup>

Model		Collinearity Statistics
		VIF
1	(Constant)	
	Clan	2.811
	Hierarchy	1.810
	Market	1.798

a. Dependent Variable: Importance

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			Tolerance
1	(Constant)	-2.535E-6	.063		.000	1.000	
	Clan	.103	.106	.103	.968	.334	.348
	Hierarchy	-.090	.084	-.090	-1.065	.288	.552
	Market	-.163	.084	-.163	-1.941	.054	.555
	Acceptance	-.193	.071	-.193	-2.702	.007	.774
	Importance	.176	.073	.176	2.423	.016	.743

### Coefficients<sup>a</sup>

Model		Collinearity Statistics
		VIF
1	(Constant)	
	Clan	2.877
	Hierarchy	1.812
	Market	1.803
	Acceptance	1.292
	Importance	1.345

a. Dependent Variable: USE